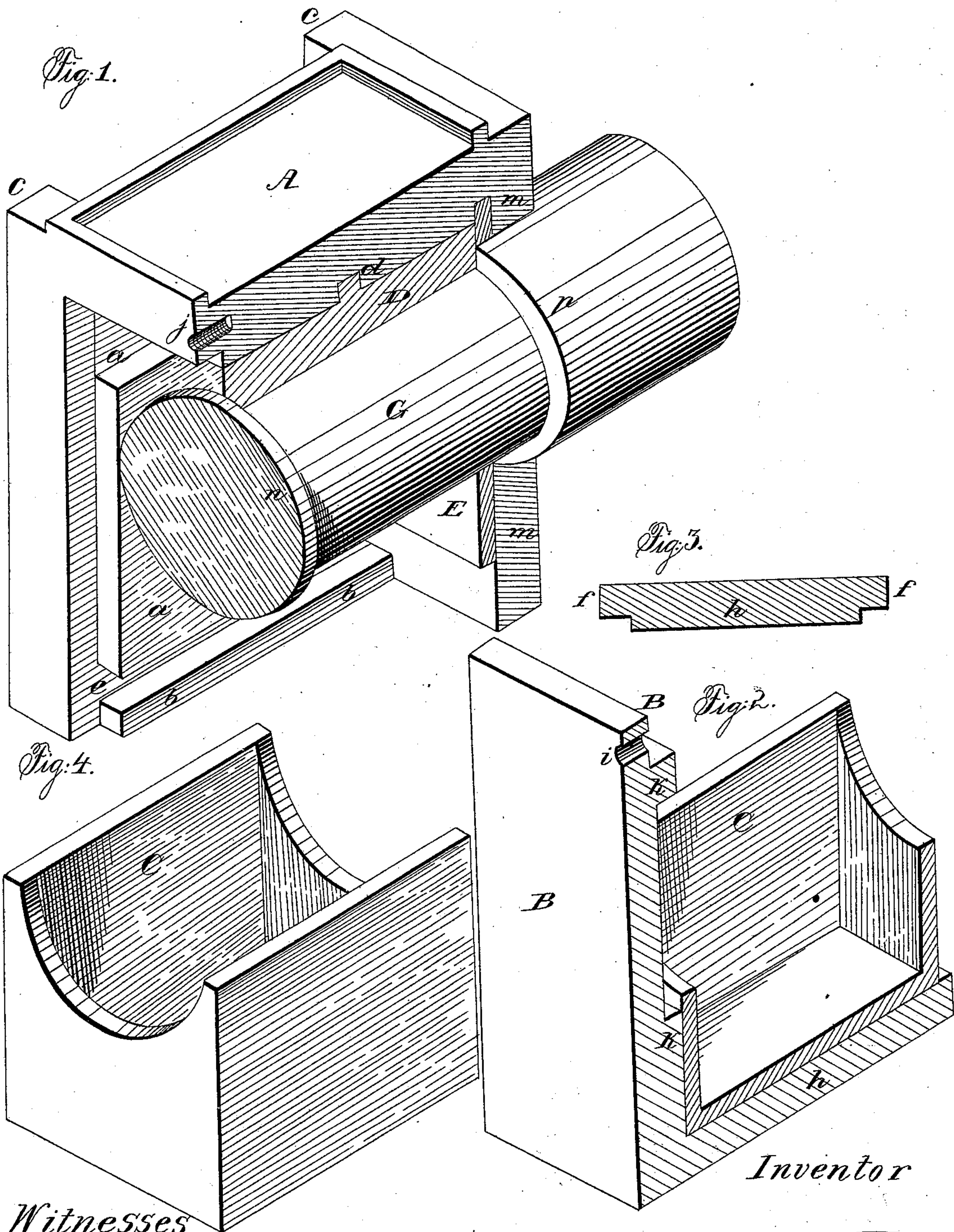


D. R. PERKINPINE.

Car-Axle Box.

No. 14,468.

Patented Mar. 18, 1856.



Witnesses

Henry Howson
William E. Walton

Inventor

David R. Perkins

UNITED STATES PATENT OFFICE.

DAVID R. PERKINPINE, OF PHILADELPHIA, PENNSYLVANIA.

BOX OF RAILROAD-CAR AXLES.

Specification of Letters Patent No. 14,468, dated March 18, 1856.

To all whom it may concern:

Be it known that I, DAVID R. PERKINPINE, of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Axle-Boxes for Locomotives and Cars; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention consists in constructing and arranging the axle boxes for locomotives and cars in such a manner that the outside end and bottom (which I cast in one separate piece, from the other portion of the box) may be easily removed and replaced at pleasure, and with it a reservoir for the oil and cotton, which is likewise a separate and distinct casting, the object being in order that the axle bearing and journal may be easily examined and the reservoir cleaned and replenished with lubricating matter, with greater ease and facility than the same can be accomplished in other axle boxes.

In order to enable others skilled in the art to make and use my invention I will now proceed to describe its construction and operation.

On reference to the drawing Figure 1, is a perspective view of my improved box the latter being shown in section and the axle in elevation. Fig. 2, is the sliding piece which forms the front end and bottom of the box from which it is shown detached and in section. Fig. 4, is a separate perspective view of the reservoir. Fig. 5, is a section of the part of the sliding piece which forms the bottom of the box.

The same letters of reference allude to similar parts throughout the several views.

A is the shell of the axle box having flanges *c, c* which act as retaining pieces when placed in the hanger in the same way as ordinary boxes. On the inside are cast pieces *a, a* shaped at the top in such a manner as to receive the brass step D which is maintained in its proper lateral position by the projection *d* fitting into a recess formed in the box. A groove *e* divides the piece *d* from the flange *b*, and into this groove slides the bottom *h* of the movable piece B, projections *f* being arranged on the latter for this purpose.

C is the reservoir in which is placed the cotton saturated with oil or other lubricating substance. This reservoir is arranged at the top to fit pretty exactly to the journal of the axle, and rests on the bottom *h* of the movable piece B. In the top of the latter is a hole *i* for the admission of a small bolt which screwing into the hole *j* in front of the box A serves to secure the piece B to the latter when in its proper position. On the inside of the piece B is a recess *k* of a circular form to receive the collar *n* of the axle G.

E is a piece of leather fitting accurately to the enlarged portion *p* of the axle and confined between the step D, and back *m* of the box A in a recess formed for the purpose, thus preventing any escape of the oil in that direction.

Although for the sake of better illustrating my improvements I have shown in the drawings one half only of the axle box it will be understood that the other half is exactly similar.

It will be easily seen without further description that by simply withdrawing the small bolt which passes through *i* and screws into *j* the piece B with the reservoir C can be in a moment removed or replaced, affording every facility for examining the journal and for cleaning and replacing the reservoir.

I do not claim in connection with axle boxes a movable reservoir with lubricating substances, or the method of constructing the box with a loose bottom, but

What I claim and desire to secure by Letters Patent is—

The movable piece B, the vertical portion of which forms the front, and the horizontal portion the bottom of the box in combination with the preparations *a* and *b* and groove *e* on the latter, for the purpose of quickly exposing the whole interior of the box for examination or cleansing and as quickly covering the same.

DAVID R. PERKINPINE.

Witnesses:

HENRY HOWSON,
WILLIAM E. WALTON.