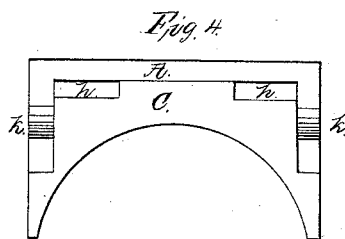
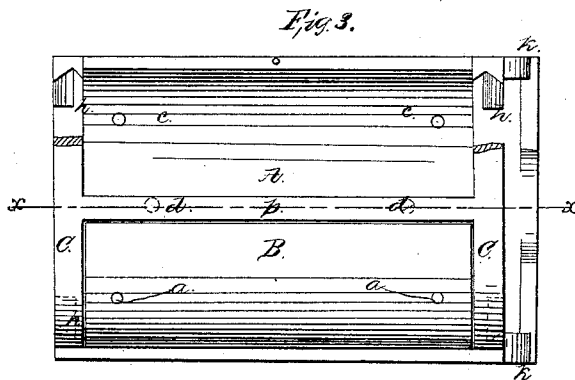
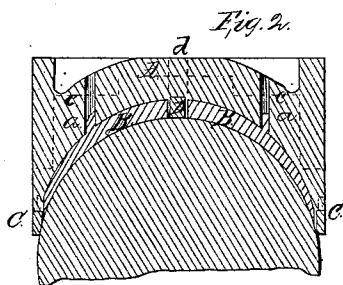
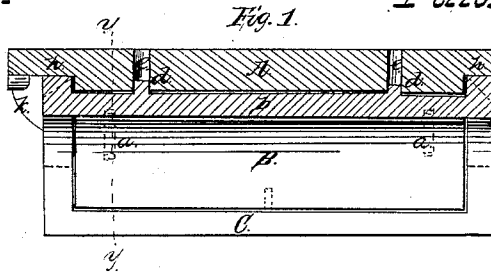


G. H. Henfield,

Car-Axle Box,

N^o 83,961.

Patented Nov. 10, 1868.



Witnesses.
Thos. Lusk.
J. A. Fraser.

Inventor.
G. H. Henfield.
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Attorneys.



GEORGE H. HENFIELD, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 83,961, dated November 10, 1868.

IMPROVED JOURNAL-BOX

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE H. HENFIELD, of San Francisco, in the county of San Francisco, and State of California, have invented a new and useful Improvement in Journal-Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying plate of drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section, taken in the line *x x*, fig. 3.

Figure 2 is a cross-section, taken in the line *y y*, fig. 1.

Figure 3 is an inside view of my improved journal-box.

Figure 4 is an end view.

Similar letters of reference indicate corresponding parts.

This invention relates to improvements in the construction of bearings for railroad-car axles, or other journals, and consists in forming a brass or other metal attachment, in connection with a cast-iron box or shell, in such manner as to hold securely in place sections of Babbitt or other soft metal for the bearings, as hereinafter described.

A represents an outside cast-iron shell or box, on the inner side of which are fitted sections of Babbitt-metal bearings, B B, which set in their bed, and are held in place by pins, *a a*, that pass through holes, *c c*, in the shell A.

A brass or iron frame, C, is made to fit around the outer sides of the Babbitt-metal bearings B B, having

a centre-bar, *b*, running longitudinally, with the box between them, and secured to the shell A by pins *d d*, on the centre-bar *b*, which pass through holes, *e e*, in the shell, and are to be riveted on the outside, or may be threaded and held with nuts.

To prevent endwise and lateral movement of the frame C, and keep it firmly in place, the ends are dovetailed in dovetail-recesses, *h h*, in the cast-iron shell A.

The outer projecting end of the shell A is strengthened to prevent it from breaking off by excessive pressure, to which railroad-car boxes are exposed, by casting lips or corner-pieces, *k k*, connecting the sides and top of the shell.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The frame C, having a centre-bar, *b*, secured to the shell A by pins *d d*, and dovetailed ends in the recesses *h h*, in combination with the soft-metal bearings B B, separated by the single longitudinal bar *b'*, substantially as described.

2. The frame C, surrounding and separating longitudinally the soft-metal bearings B B, the latter secured to the shell A by pins *e*, and the former by pins *d*, and dovetail-recesses *h h*, protected and strengthened by the corner-pieces *k k*, cast upon the shell, as herein shown and described.

The above specification of my invention signed by me, this 14th day of October, 1867.

GEORGE H. HENFIELD.

Witnesses:

R. P. LEWIS,

W. O. ANDREWS.