(No Model.)

R. BEDDALL.

JOURNAL BEARING.

No. 458,092. Patented Aug. 18, 1891.

Fig. 1.

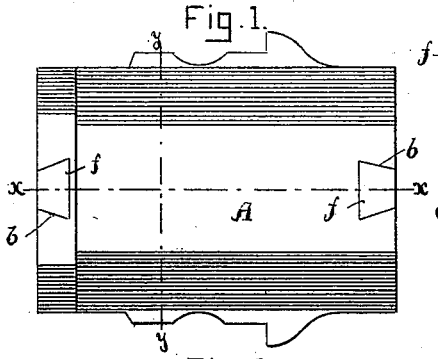


Fig. 2.

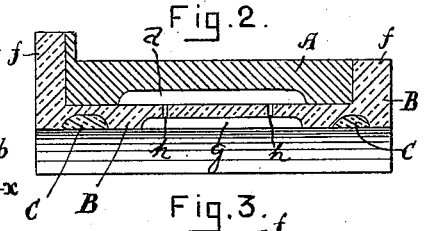


Fig. 3.

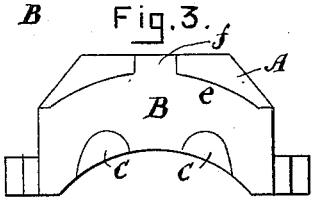


Fig. 4.

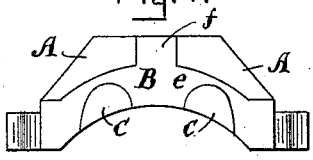


Fig. 5.

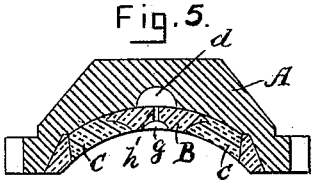


Fig. 6.

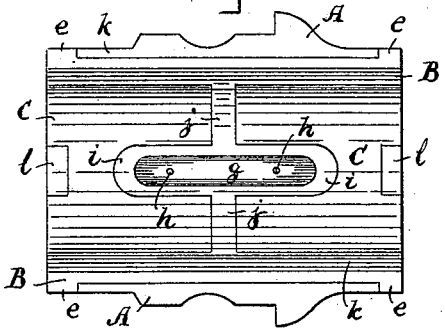


Fig. 7.

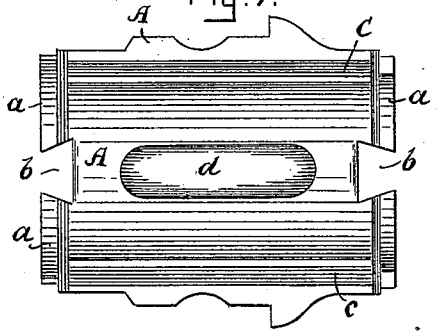


Fig. 8.

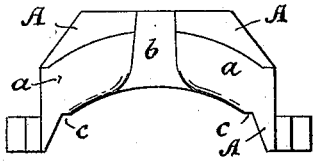


Fig. 9.

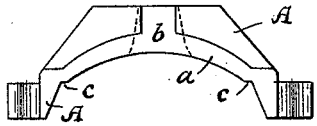


Fig. 10.

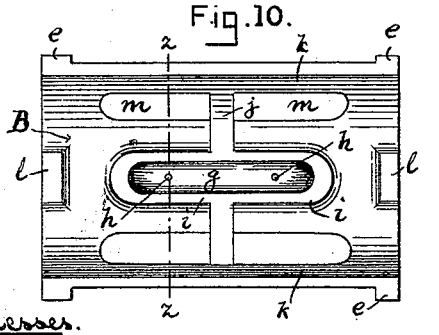
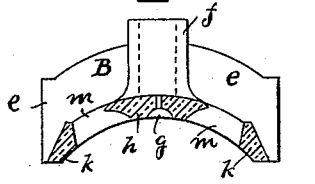


Fig. 11.



Witnesses.
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Fawell. H. Atwood

Inventor.
Richard Beddall
by Edwin Clarke.
attorney.

UNITED STATES PATENT OFFICE.

RICHARD BEDDALL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO FREDERIC BARLOW, OF SAME PLACE.

JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 458,092, dated August 18, 1891.

Application filed August 19, 1890. Serial No. 362,377. (No model.) Patented in Canada November 8, 1889, No. 32,749.

To all whom it may concern:

Be it known that I, RICHARD BEDDALL, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Journal-Bearings, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates more especially to that class of journal-bearings employed for use with car-axles, locomotive-axles, and such like, although they may be employed for many other descriptions of journals; and the invention consists in certain details of construction, as hereinafter fully described, and set forth in the claim, reference being had to the accompanying drawings, in which—

Figure 1 represents a plan or top view of a journal-bearing embodying my invention. Fig. 2 is a vertical longitudinal section of the same, taken on line *x x* of Fig. 1. Fig. 3 is a view of one end, and Fig. 4 a view of the opposite end. Fig. 5 is a transverse vertical section taken on line *y y* of Fig. 1. Fig. 6 is a bottom or interior view of the journal-bearing. Fig. 7 is a like view with the shell removed. Figs. 8 and 9 are views of the respective ends of the same. Fig. 10 is a view of the shell detached. Fig. 11 is a transverse vertical section of the same, taken on line *z z* of Fig. 10.

A represents the body of the bearing, and B a shell or bearing-surface which is filled with babbitt or other suitable metal C.

The body A of the bearing is made of any suitable metal and is of the usual form externally. At each end it is provided with a recess *a* and a dovetail opening *b*, (see Figs. 7, 8, and 9,) and on each side of the bearing is formed a shoulder *c*, which extends the entire length of the body and against which the shell B has a bearing. In the center a groove or recess *d* may be formed to receive any suitable lubricant. The shell B is of a form to correspond and fit into the body A, it being provided with flanges *e*, that fit into the recesses *a*, and also dovetail projections *f*, that fit into the dovetail opening *b*, which when inserted in place are hammered over at their upper end, and the shell is thus firmly held in place. The shell is provided in the center with a groove *g* and by means of a small hole or holes *h* communicates with the recess *d* in the body A, and around this groove *g* is a small rim *i*, from the center of which, on each side, is a small rib *j*, that connects with the sides *k*, so that they are all on the same curve, and at each end of the shell is a small projection *l*, which also conforms to the curve before mentioned. The shell is also provided with openings *m*, that extend through its entire thickness. These openings are of the form shown, and assist in holding the babbitt C in place, which babbitt is run in between the rim *i*, rib *j*, sides *k*, and projections *l*, so that when the babbitt is in the shell the inner surface is of a proper curve to fit snugly upon the journal or shaft.

It will be seen that by this construction the journal-bearing is composed of two separate or independent parts—viz., the body A and the shell B—which are held together by the dovetailed slots *b* and projections *f*, so that when a bearing has become worn, so as to be unfit for use, the shell can be removed and a new one inserted, which when babbitted will be equal to an entire new bearing. Thus the extra cost of a new body is saved, and by reason of its being formed in two parts the body A is not so liable to become heated as a solid bearing, and should the bearing under any circumstances become heated, so that the babbitt runs out, the journal will still have a bearing on the shell at *i*, *j*, *k*, and *l*, and when the shell is rebabbitted will be equal to a new bearing.

Instead of the dovetails at the end, countersunk holes might be formed in the body A and projecting piece be formed in one with the shell B, which when the two are placed in position are hammered over, thereby filling the countersunk holes and holding the shell in place.

What I claim is—

A journal-bearing consisting of a body A,

having at each end a recess *a* and dovetail opening *b*, a shell B, having flanges *e* and dovetail projections *f*, projections *l*, and openings *m*, the sides of which are of dovetail form, and babbitt C, constructed, combined, and arranged substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 15th day of August, A. D. 1890.

RICHARD BEDDALL.

Witnesses:
CHAS. STEERE,
EDWIN PLANTA.