(No Model.)

E. COPLEY, J. F. SELDOMRIDGE & G. DE LA VERGNE.

JOURNAL BEARING.

No. 296,823. Patented Apr. 15, 1884.

Fig. 1.

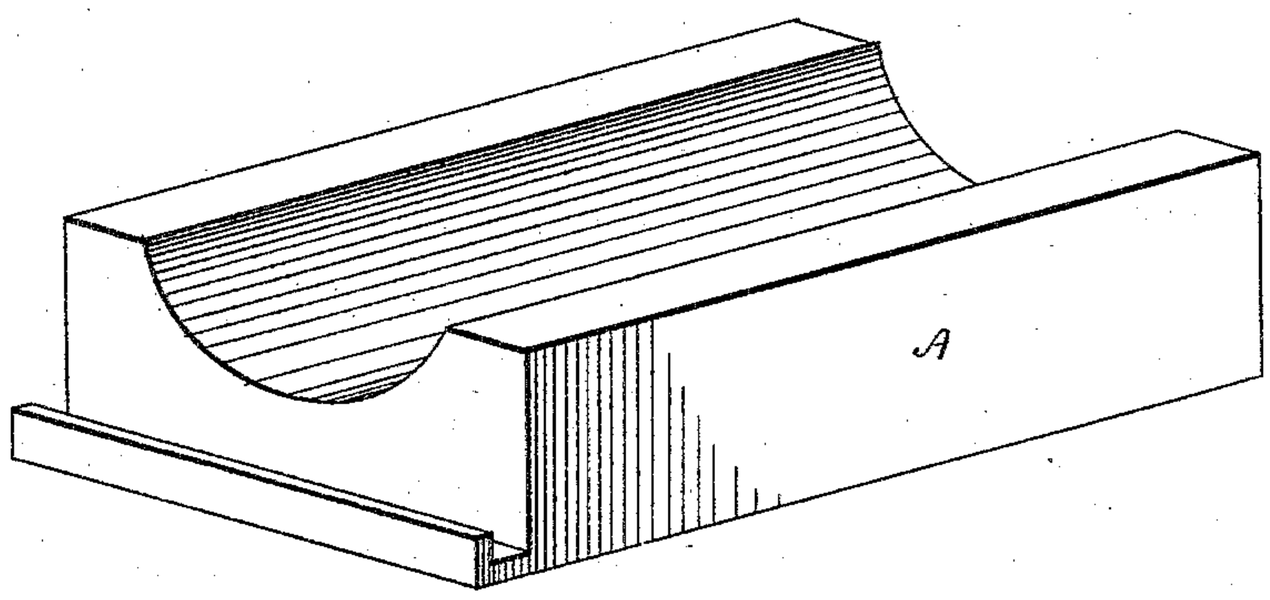
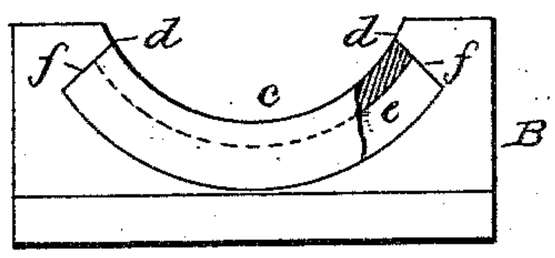


Fig. 2.



WITNESSES

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JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 296,823, dated April 15, 1884.

Application filed January 10, 1884. (No model.)

To all whom it may concern:

Be it known that we, EDWARD COPLEY, JUSTUS F. SELDOMRIDGE, and GEORGE DE LA VERGNE, citizens of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and useful Journal-Bearing, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to the manufacture of journal-boxes and journal-bearings made of papier-maché or leatherette, or other like material, for use on railway-cars and machinery in general.

The main objects of this invention are to produce a bearing-surface that shall be slow to excite frictional heat and will not cut or grind the journal, since it is a well-known fact that simple friction generates comparatively little heat, while metal running upon metal, in the absence of oil, is the primary cause of the rapid frictional heat and grinding in journal-boxes. Our improved journal-bearing, made of papier-maché or leatherette, obviates cutting or grinding of the journal, and consequently little or no heating of the box, thus enabling the lubricating-oil to remain in a pure condition much longer than in the metal bearing-boxes.

With these and other objects in view our invention consists in a journal-bearing made of papier-maché, leatherette, or like material.

Our invention further consists in the novel construction of the journal-bearing, as will hereinafter be more fully set forth, and pointed out in the claim.

In the annexed drawings, Figure 1 represents one-half of a journal-box bearing made of papier-maché or leatherette; and Fig. 2 represents an end view of a journal-box bearing with the improved filling, constituting a lining for the bearing-surface.

To carry out our invention suitable molds, press, or dies are constructed to fashion and shape the sectional journal-bearings. To make the journal-bearings entirely of papier-maché or leatherette, the material is prepared into a pulpy or plastic condition and run into the mold or press in a manner well known in the art of casting or shaping articles. After the plastic material has settled and become solidified into the article, it is removed and may be subjected to further pressure to make the same more compact and solid, and at the same time give a smooth bearing-surface for a given-sized journal. When the journal-bearings are made in molds, it will be desirable to subject them to pressure in a hydraulic press, to make the same more compact and solid, and to secure a desirable and smooth bearing-surface for the journal. To reline or reface a worn journal-bearing, the journal-bearing is placed in a suitably-constructed mold or press, and the plastic material run into the mold for a mechanical connection very much like that employed in the Babbitt process of relining journal-bearings. After the material has become hardened and united to the journal-bearing block, the thus-filled box is removed and may be subjected to pressure for a smooth bearing-surface.

In the accompanying drawings, A represents the section made entirely of papier-maché, leatherette, or equivalent material. B represents another section of a journal-box, filled or lined with papier-maché, leatherette, or equivalent material. The section B is formed with a longitudinal passage, *c*, with inclined shoulders *d*, and also end chambers or recesses, *e*, and inclined shoulders *f*, corresponding with the shoulders *d* of the longitudinal passage *c*. This formed passage and end recesses form a chamber to receive and secure the herein-described filling in position from displacement.

In order to define more clearly the nature and advantages of our invention, we would have it understood that we claim nothing shown in the patent to Devlan, No. 1,268, dated July 9, 1861.

What we claim as our invention, and desire to secure by Letters Patent, is—

A journal-bearing section formed with the passage *c*, shoulders *d*, end recesses, *e*, and end shoulders, *f*, in combination with a filling of papier-maché or leatherette, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

EDWARD COPLEY.
JUSTUS FORDICE SELDOMRIDGE.
GEORGE DE LA VERGNE.

Witnesses:
WILLIAM STARK,
W. B. GASKILL.