

(No Model.)

C. F. BRIGHAM.

JOURNAL BEARING.

No. 299,109.

Patented May 27, 1884.

Fig. 1.

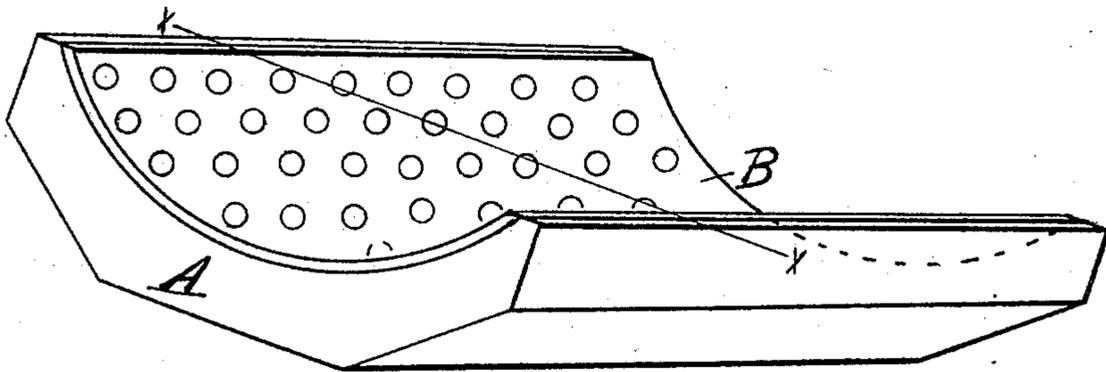
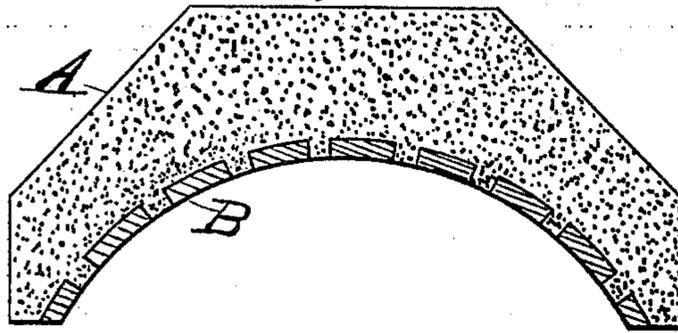


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES F. BRIGHAM, OF WORCESTER, MASSACHUSETTS.

JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 299,109, dated May 27, 1884.

Application filed September 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. BRIGHAM, of Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improved Journal-Bearing, of which the following is a specification.

This invention relates to journal-bearings for the axles of cars, &c.; and the object sought is to produce a journal-bearing which is composed of a combination of paper-pulp and asbestos chemically treated, as hereinafter described, and provided with a metal lining on its journal side, thus forming a journal-bearing which is capable of great wear without doing damage to the journal, and one that can be constructed at much less cost than the journal-bearings now in use.

In the accompanying drawings, forming part of this specification, Figure 1 illustrates a perspective view of my improved journal-bearing, showing the manner in which I preferably arrange the parts; and Fig. 2 represents a transverse section through the line *xx*, Fig. 1.

The principal portion of my improved bearing, which forms the body A, is made of paper-pulp and asbestos, as will be hereinafter explained. The side next to the journal is provided with a perforated sheet of metal (shown at B, Figs. 1 and 2) to give the requisite bearing-surface.

These bearings can be made of paper-pulp alone; but there is a possibility of its becoming heated, when it would either burst or break, and thus be useless. In order to remedy this

evil, I usually add enough asbestos to destroy the heating propensity of the paper, so that it will usually run cool. The paper-pulp and asbestos are chemically treated with the oxide and chloride of magnesium, as follows: I usually mix equal parts (by weight) of asbestos and paper-pulp with oxide of magnesium, and when thoroughly incorporated temper with chloride of magnesium to the proper consistency for molding. The perforated metal lining B is used to give the requisite bearing-surface at the start.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A journal-bearing composed of asbestos and paper-pulp treated with oxide and chloride of magnesium, in the manner and for the purpose herein specified.

2. A journal-bearing composed of asbestos and paper-pulp treated with oxide and chloride of magnesium, as herein described, and provided with a perforated metal lining on its journal side, all as described, and for the purpose set forth.

In testimony that I claim the foregoing improved journal-bearing, as above described, I have hereunto set my hand this 9th day of May, 1883.

CHARLES F. BRIGHAM.

Witnesses:

J. K. GREENE,
EDW. B. GLASGOW.