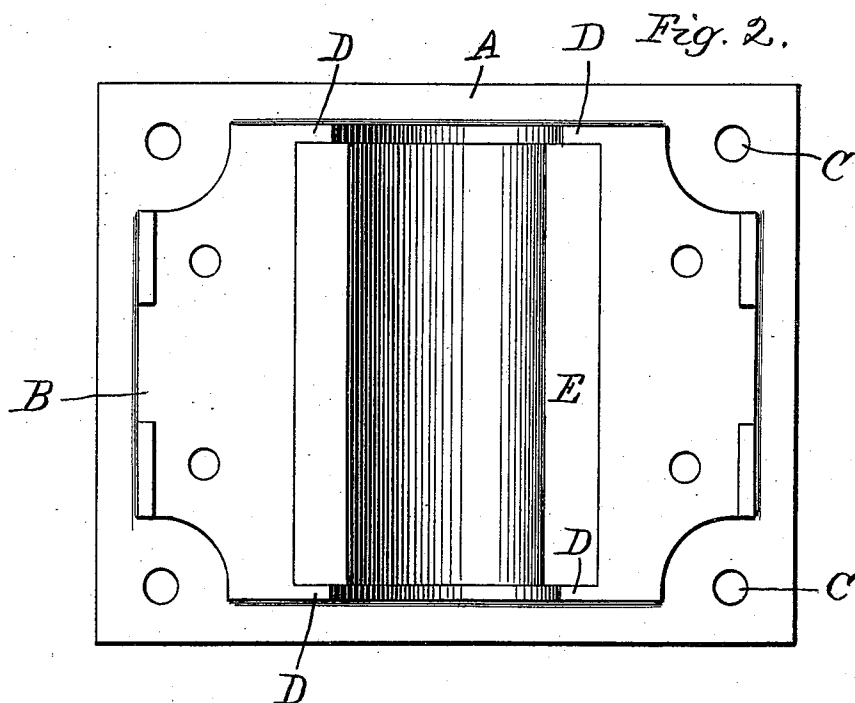
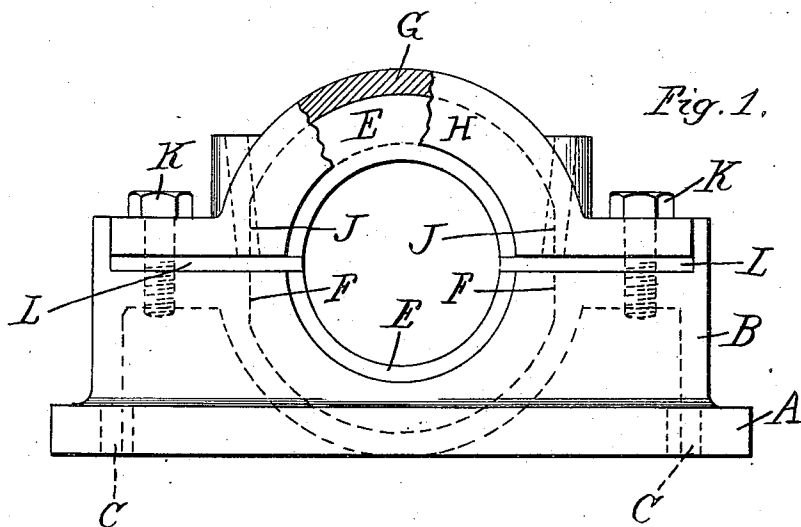


(No Model.)

J. McLACHLAN.
JOURNAL BEARING.

No. 552,299.

Patented Dec. 31, 1895.



Witnesses,

E. T. Wray.

J. H. Conner.

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John McLachlan

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his Atty.

UNITED STATES PATENT OFFICE.

JOHN McLACHLAN, OF CHICAGO, ILLINOIS.

JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 552,299, dated December 31, 1895.

Application filed February 11, 1895. Serial No. 537,867. (No model.)

To all whom it may concern:

Be it known that I, JOHN McLACHLAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Journal-Bearings, of which the following is a specification.

My invention relates to journal-boxes, and has for its object to provide a convenient journal-box, one which shall be comparatively free from noise, to a certain degree self-lubricating and adjustable to accommodate itself to its own wear or the wear of the journal running in it.

My invention is illustrated by the accompanying drawings, wherein—

Figure 1 is a view of the journal-box with part removed. Fig. 2 is a plan view.

Like letters refer to like parts in both the figures.

A is the base around and upon which is built up the wall B. The base may be fixed in position by bolts passing through the apertures C C. The sides of the wall or casing are formed, as shown, with the flanges D D and the internal cavity or recess semicircular in cross-section, adapted to receive the journal-lining E. This journal-lining E is of a certain substance which I will hereinafter describe. The lining E is in the shape of one-half of an annulus in cross-section of the half of a cylinder when the entire lining is considered, and it lies in the cavity referred to, being kept from endwise motion by the flanges D D. It is preferably flattened at F to engage a correspondingly flattened portion of the cavity in which it lies to prevent its rotation.

G is a case or cover having the side flanges H and a cavity similar to that just described, but flattened at J J. When the two cavities are full, as indicated, the journal is surrounded by a substantially continuous circle of the substance referred to. The cap is secured by the bolts K K. Between the cap and the top of the lower portion is interposed the packing L, which is of any desirable substance or material, but adjustable as to thickness, and the inner edge of this substance forms a portion of the wall of the journal chamber or box.

The substance which I employ is a fibrous material, such as wood, the fiber of which

has not been broken or ruptured, but which remains in substantially its natural condition. This substance or wood or fiber is, however, first compressed to a very great degree, particularly so as to express the albuminous substance therefrom, and to force and flatten the fibers into close and intimate contact with each other. This substance is therefore the natural wood or fibrous material, but in a state different from that from which it is produced.

The journal-box is preferably composed of sections divided from each other by radial lines and exposing the ends of the fiber to the journal, though of course this is not essential. Thus we present as the wearing-surface for the journal the natural fiber and not pulp or the like. Such substance in the process of its manufacture is very likely to contain or to have incorporated with it a quantity of oil, grease, or the like, and on account of the peculiar character of the fibrous material or on account of such oil it serves as a lubricant or a self-lubricating journal-box. While the substance is prepared exceedingly hard and tough it is also comparatively noiseless in operation. There is, to be sure, with such fibrous material a certain amount of wear; but this is taken up by the gradual increase in thickness or adjustment of the packing L, whereby the two portions of the journal-box are brought nearer together and thus caused to keep closing up about the journal as to have a close-fitting smoothly-operating journal-box.

The fibrous portions of such journal-box may be easily removed at any time and others substituted.

I have suggested the use of the fibrous material in sections with the ends of the fiber exposed to the journal; but this, of course, is not imperative.

I claim—

1. The combination of a journal box with a lining therefor composed of wood highly compressed, the natural fibers remaining unbroken and in their natural arrangement, but from which the softer substances have been largely removed, so that the fibers lie in a closer and more intimate contact and relation than in the natural state, substantially as shown and for the purpose described.

2. The combination of a journal box with a lining therefor composed of wood highly compressed, the natural fibers remaining unbroken and in their natural arrangement, but
5 from which the softer substances have been largely removed, so that the fibers lie in a closer and more intimate contact and relation

than in the natural state, the fiber ends directed toward the center, substantially as shown and for the purpose described.

JOHN McLACHLAN.

Witnesses:

F. P. STONE,

E. B. RYNNING.