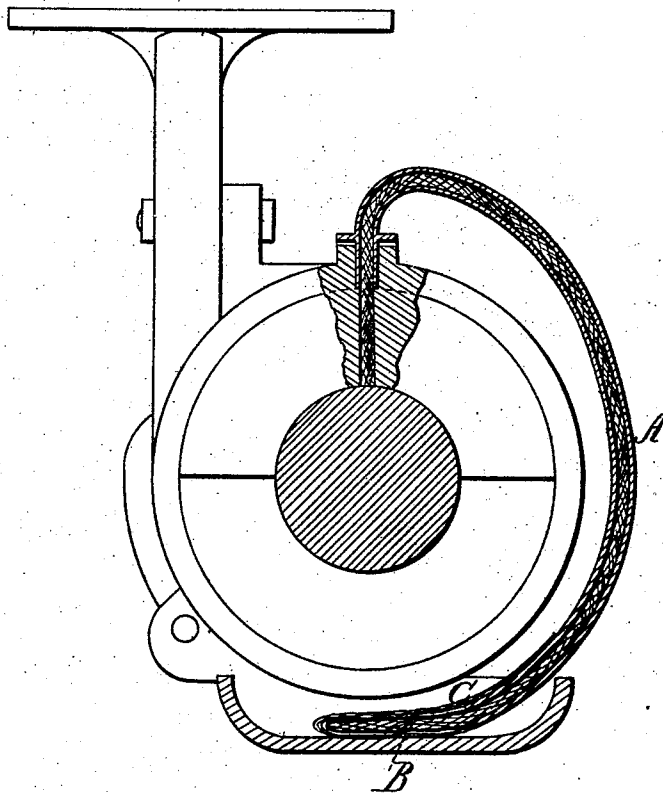


C. Bean,

Lubricating Journal.

N^o 104,821.

Patented Jun. 28. 1870.



Witnesses

Winchman
W. H. Brooks

Inventor
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per Wm. H. G.
Attorneys.

United States Patent Office.

CHARLES BEAN, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 104,821, dated June 28, 1870.

IMPROVEMENT IN LUBRICATING JOURNALS.

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, CHARLES BEAN, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Lubricating Journals; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new and useful improvement in the method of oiling or lubricating the journals of revolving shafting and journals generally, and consists in conveying oil to the journal from an open drip-pan beneath the journal through a tube, by means of capillary attraction, so arranged as to filter the gudgeon or drip oil from all impurities, and deliver it to the bearing, as will be hereinafter more fully described.

The accompanying drawing represents a vertical section of a shaft-hanger, showing the boxes and the shaft, and also the drip-pan, in red color, with my lubricating device attached thereto.

Similar letters of reference indicate corresponding parts.

A is the lubricating tube, which may be of any convenient size and of any shape, as round, flat, or oval.

It is bent so as to enter the drip-pan beneath the hanger, and curve upward around the outside of the box, and enter the cap of the box, as seen in the drawing.

B represents a piece of candle-wicking, or other porous or fibrous material, which is drawn through the tube, with its lower end immersed in the oil, which is placed in the drip-pan, and with its upper end resting on the journal or contained in the aperture in the cap, so that the oil or lubricating material may be conveyed directly to the journal.

To accomplish this it may not perhaps be necessary for the end of the capillary to be in actual contact with the journal, but if in contact the oil would be

more rapidly discharged, as something of a vacuum would be created by the revolving journal, which would induce a more free discharge of the oil.

Over the lower end of the tube, and inclosing the lower end of the wick or capillary B, is a bag, C, of some fibrous or porous material, for straining the oil before it is taken up to the journal.

As the pan is placed so as to catch any "drip" from the journal, the quantity carried up may be more than sufficient to properly lubricate the journal, but no waste can occur therefrom, while the dust, which might settle in the pan, can do no injury, the oil being strained clean before entering the tube.

The impure or gudgeon oil falling from the bearing when overcharged, enters the drip-pan and is again delivered to the journal in as pure a state as when first applied. By this constant flow of oil through the journal, it is kept clean and free from dust and grit, all of which accumulates in the reservoir, from which it should be from time to time removed.

I do not broadly claim lubricating a journal by means of capillary attraction, as I am aware that it has been done before, but I am not aware that a capillary inclosed in a tube has taken pure oil from a drip-pan, carried and delivered it to the journal, as above described, before my present invention.

Having thus described my invention,

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

The journal lubricator herein described, consisting of the bent tube A, containing the capillary B, and provided with strainer C, arranged as described, for conveying the oil from the drip-pan, and delivering it, freed from all impurities, to the bearings, substantially as set forth.

CHARLES BEAN.

Witnesses:

DEXTER B. POTTER,
GEO. F. BUNCE.