

W. W. CRANE.

Shaft-Hangers.

No. 133,415.

Patented Nov. 26, 1872.

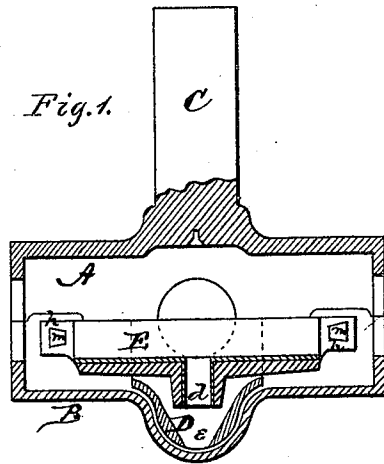


Fig. 2.

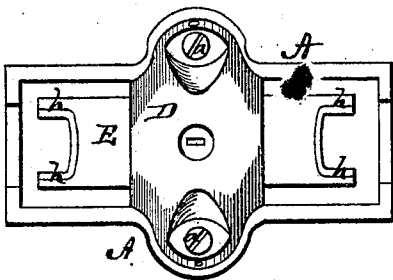


Fig. 3.

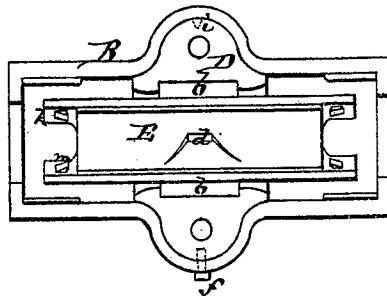
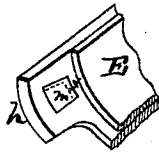


Fig. 4.



Witness:

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UNITED STATES PATENT OFFICE.

WELLSLY W. CRANE, OF AUBURN, NEW YORK.

IMPROVEMENT IN SHAFT-HANGERS.

Specification forming part of Letters Patent No. 133,415, dated November 26, 1872.

To all whom it may concern:

Be it known that I, WELLSLY W. CRANE, of Auburn, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Self-Lubricating Journal-Boxes for Shafting; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a self-lubricating journal-box for shafting, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing which forms a part of this specification, and in which—

Figure 1 is a longitudinal section of my entire journal-box. Fig. 2 is a bottom view of the upper half of the box with the saddle and the interior box. Fig. 3 is a plan view of the lower part of the box with the saddle and the interior box placed therein, and Fig. 4 is an enlarged perspective view of a part of the interior box.

My journal-box is made in two parts, A and B, the upper part A being cast with the wrist or arm C to be fitted to the hanger, and the lower part B forming the oil-receiver. D represents the saddle, which is secured to the upper section A of the journal-box by bolts *a a*, and within this saddle, upon trunnion-bearings *b b*, rests the interior or shaft-bearing box E. In the center of the saddle D is a recess with an aperture, *e*, and into the same projects a hollow projection, *d*, from the box E. By the motion of the shaft the oil is drawn up, by capillary attraction, through the projection *d*, in a constant stream to the shaft. On the inside,

in the center of one side of the oil-receiver B, is a pointed stud, *i*, which enters a recess in one side of the saddle D, and the other side of the receiver is fastened by a screw, *f*, thereby holding the oil-receiver in position.

It will readily be seen that the oil-receiver B may be removed at any time, even when the shaft is in motion, for cleaning and re-oiling, without in any way disturbing the shaft-bearing E or stopping the motion of the shaft.

At the ends of the interior or shaft-bearing box E are extensions *h h*, to each of which is secured a metallic cut-off, *m*. These metallic cut-offs are constructed substantially as shown in the drawing, having their inner edges *x* sharp and the flat surface worked back or depressed, so that said cut-off will only touch the shaft at the extreme or sharp edge *f*. The cut-offs *m m*, constructed in this manner, take the oil from the shaft after it leaves the journal-bearing, and deposit it in the oil-receiver B without waste.

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

1. The metallic cut-offs *m m*, formed upon or attached to the inner side of a journal-box, E, provided with a self-lubricating device, substantially as and for the purposes herein set forth.

2. The combination of the bisected box A B, saddle D, and interior box E, when said parts are connected together in the manner herein set forth, so that the lower part of the box or the oil-receiver B can be removed without disturbing the interior box or stopping the shaft, substantially as described.

WELLSLY W. CRANE.

Witnesses:

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