E. F. Light,

Journal Box.

No. 52,720. Patented Feb. 20, 1866.

Fig: 1.

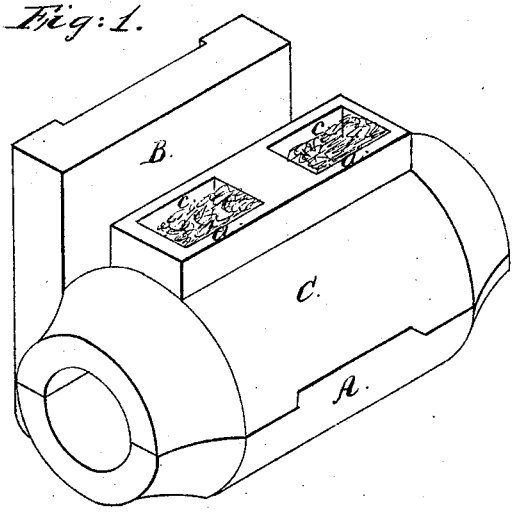


Fig: 2.

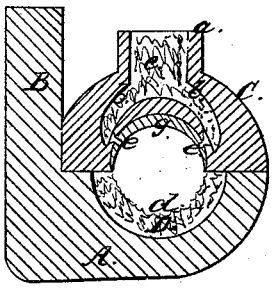
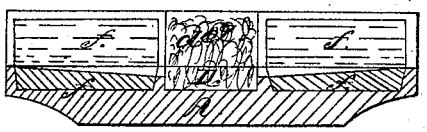


Fig: 3.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

EDWARD F. LIGHT, OF WORCESTER, MASSACHUSETTS.

IMPROVED JOURNAL-BOX.

Specification forming part of Letters Patent No. **52,720**, dated February 20, 1866.

To all whom it may concern:

Be it known that I, E. F. LIGHT, of the city and county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in Journal-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view of my improved journal-box. Fig. 2 represents a cross-section through one of the oil-cups, and Fig. 3 represents a longitudinal central section of the lower half of the journal-box without the back B.

In the drawings, A represents the lower half of the box, from the back of which rises the back piece, B, against which the top half of the box C fits when in place, as indicated in the drawings. The cap or upper half, C, of the box is cast with two oil-cups, *a a*, the bottoms of which communicate each with a chamber, *b*. From the lower part of each chamber *b* pass small holes *e* to the middle of the box.

The oil-cups *a* and their chambers *b* are filled with cotton, wool, or some fibrous material, as seen at *c*. The center of the lower half of the box is also cored out and filled with fibrous material, as seen at *d*, while central inclined grooves, 1 1, lead into the space filled with the fibrous material *d*. The lower half, A, of the box is babbitted as seen at *f*, while the upper half is babbitted, as seen at *g*.

The operation is as follows: Oil or some proper lubricating substance is turned into the oil-cups *a*, where it saturates the fibrous material *c* in said cups and their chambers *b*. It then gradually passes through the holes *e* to the shaft or journal. In case the supply of oil is sufficient to cause it to run down it is conveyed by the inclined grooves 1 1 to the space D in the part A, where it is taken up by the fibrous material *d* and brought in contact with the revolving shaft or journal.

The above-described journal-box has been tested upon bearings subjected to great strain and wear, and has been found to keep the journal well and constantly lubricated, and that, too, with a very small amount of oil.

Having described my improved journal-box, what I claim as new therein, and desire to secure by Letters Patent, is—

A journal box or bearing composed of a base-piece, A, cored out, as seen at D, and having inclined grooves 1 1, in combination with a cap, C, having oil-cups *a a*, chambers *b b*, and holes *e*, the parts being all constructed and arranged for joint operation as set forth.

EDWARD F. LIGHT.

Witnesses:

THOS. H. DODGE,

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