

(No Model.)

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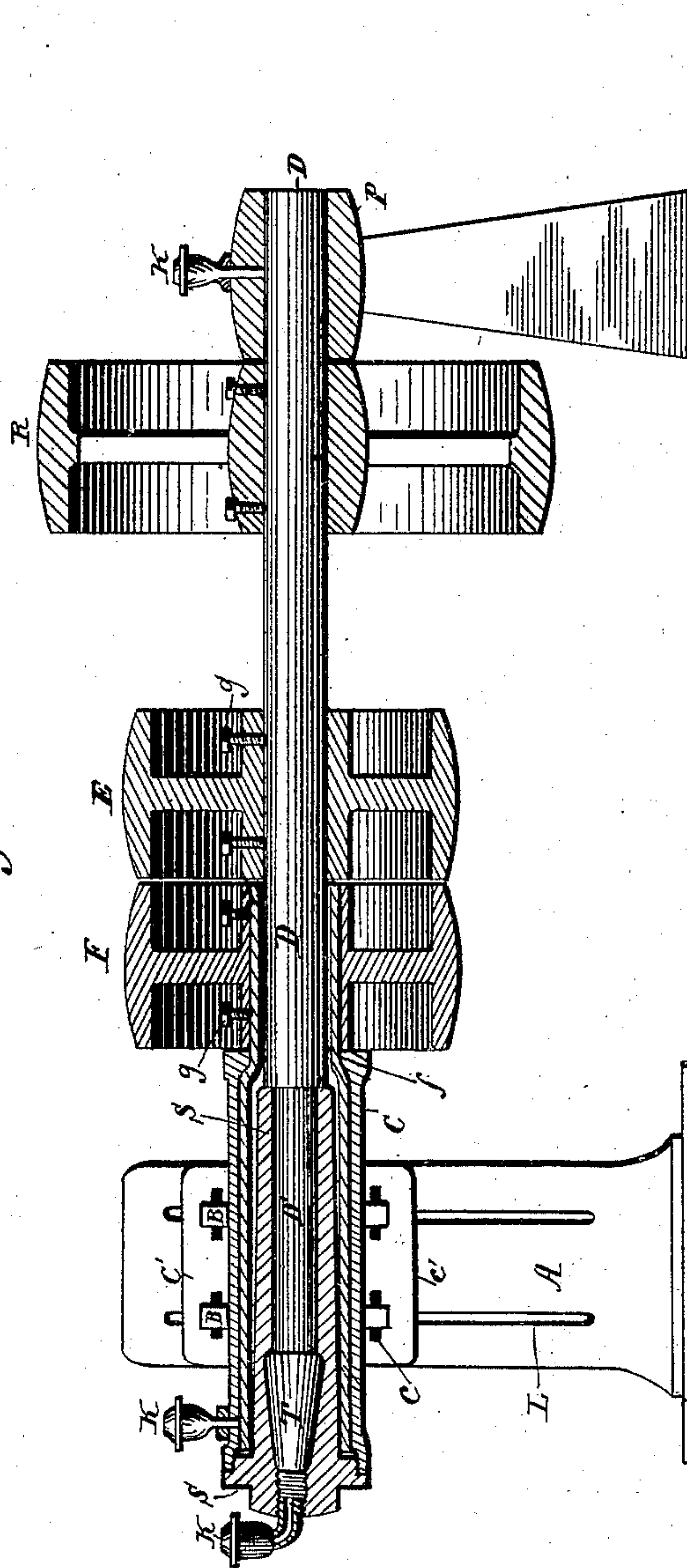
G. T. EAMES.

LOOSE PULLEY.

No. 335,183.

Patented Feb. 2, 1886.

Fig. 1.



Witnesses:

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(No Model.)

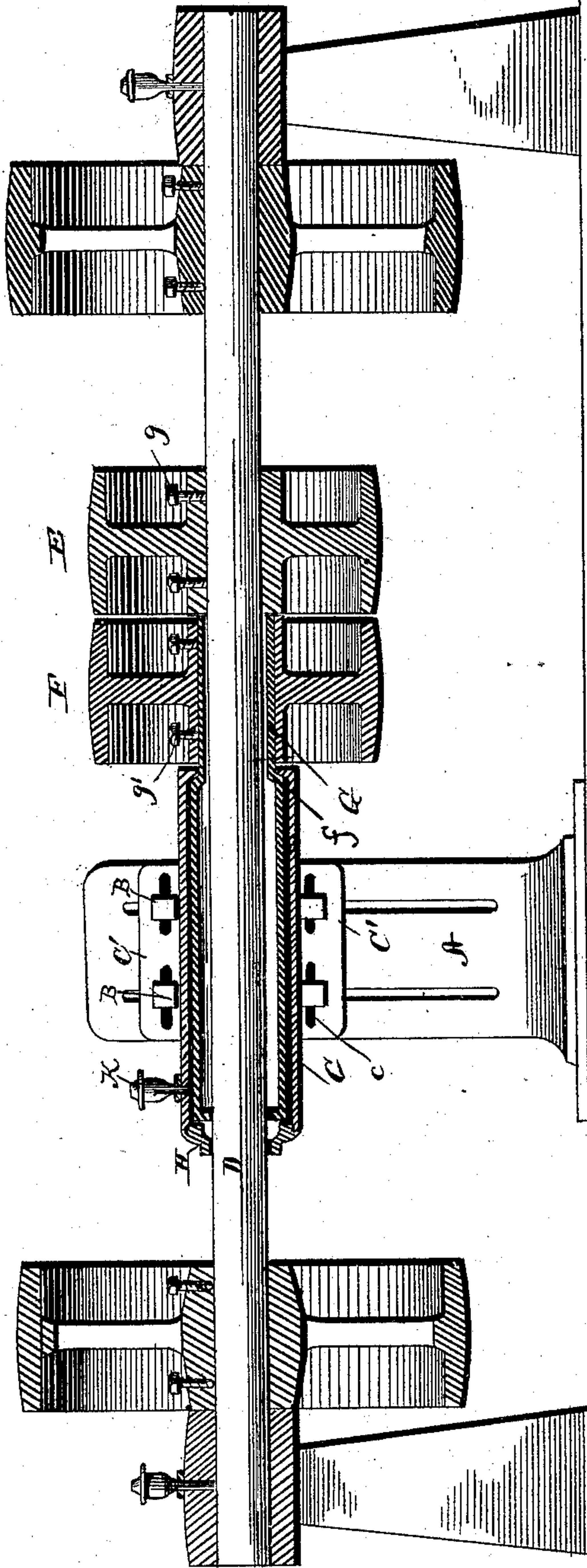
2 Sheets—Sheet 2.

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WITNESSES

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UNITED STATES PATENT OFFICE.

GARDNER T. EAMES, OF CINCINNATI, OHIO.

LOOSE PULLEY.

SPECIFICATION forming part of Letters Patent No. 335,183, dated February 2, 1886.

Application filed December 29, 1885. Serial No. 187,059. (No model.)

To all whom it may concern:

Be it known that I, GARDNER T. EAMES, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Loose Pulleys; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to journal-bearings for the loose pulleys on counter-shafts, and the object is to provide a loose pulley with a loose sleeve or independent journal and box to retain the lubricant and allow the same to be oiled while in motion; and to these ends the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings, the same letters of reference indicate the same parts of the invention.

Figure 1 is a longitudinal section of a counter-shaft, showing my loose pulley in place; and Fig. 2 is a modification of the same, showing the loose pulley in a different position on the counter-shaft.

D is the counter-shaft, F the loose pulley, and E the fast pulley, rigidly secured to the counter-shaft by set-screws *g g*.

G is the hollow sleeve or loose-pulley journal, to which the said loose pulley is secured at one end by set-screws *g'*, and C is the box or bearing in which the loose-pulley journal G is mounted. The hollow journal G has an enlargement, *f*, to correspond to the chamber in the box C, and to the larger end thereof is fitted a bearing, S, screwed into the end thereof. This bearing S is concentric with the inside of the box C, and through it passes the counter-shaft D, which is shown reduced at D' in Fig. 1 to form a journal-bearing.

A is the loose-pulley hanger, and L L show the vertical slots in same through which the bolts B pass, and *c c* are transverse slots in the flange of the box C; and it will be seen that when the bolts B are loosened the box C can be adjusted in any direction to secure the true alignment of the shaft D between the hangers.

The oil-cups K furnish the oil direct to the bearings.

The operation is as follows: When the belt is shifted from the tight to the loose pulley, the journal revolves with it, while the counter-shaft remains stationary, as it is entirely free from it, and the wear and friction is taken up by said loose-pulley journal, and the interior of the box C being filled with oil insures a thorough lubrication, as the oil from the cup on the end passes through the bearing S and chamber T and oils the journal D' of counter-shaft D; thence it goes into the recess in the journal G, and then by gravity it passes into the box C, and is thus utilized a second time.

In the modification shown in Fig. 2 the operation is the same, except that the bearing S is replaced by a nut, H, which is bored to allow the counter-shaft to pass entirely through it.

The oil-cups K being stationary, the whole device can be oiled while in motion.

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

1. The combination, with the hollow journal G and recessed box C, of the adjustable hanger A, as set forth.

2. The combination, with the box C and bearing S, of the hollow journal G and shaft D, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GARDNER T. EAMES.

Witnesses:

J. B. WILLIAMS,
EDW. JOHNSON.