

(No Model.)

W. F. PARISH.

MECHANISM FOR FINISHING ENGINE BED FRAMES.

No. 332,743.

Patented Dec. 22, 1885.

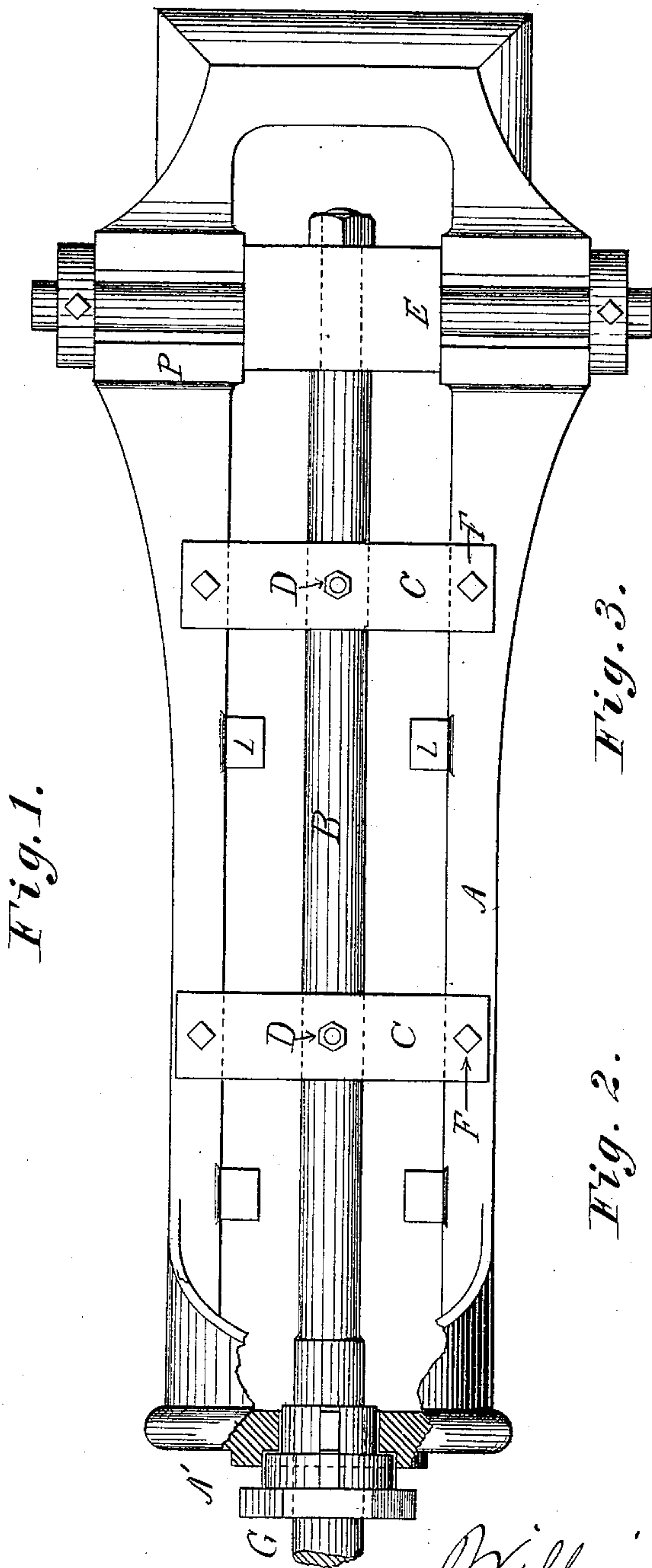


Fig. 1.

Fig. 3.

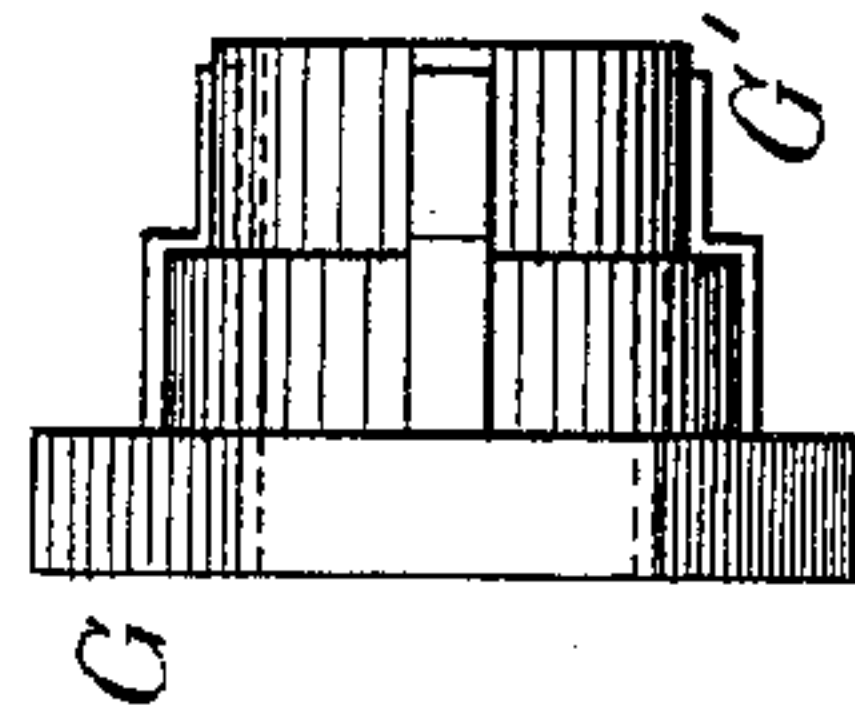
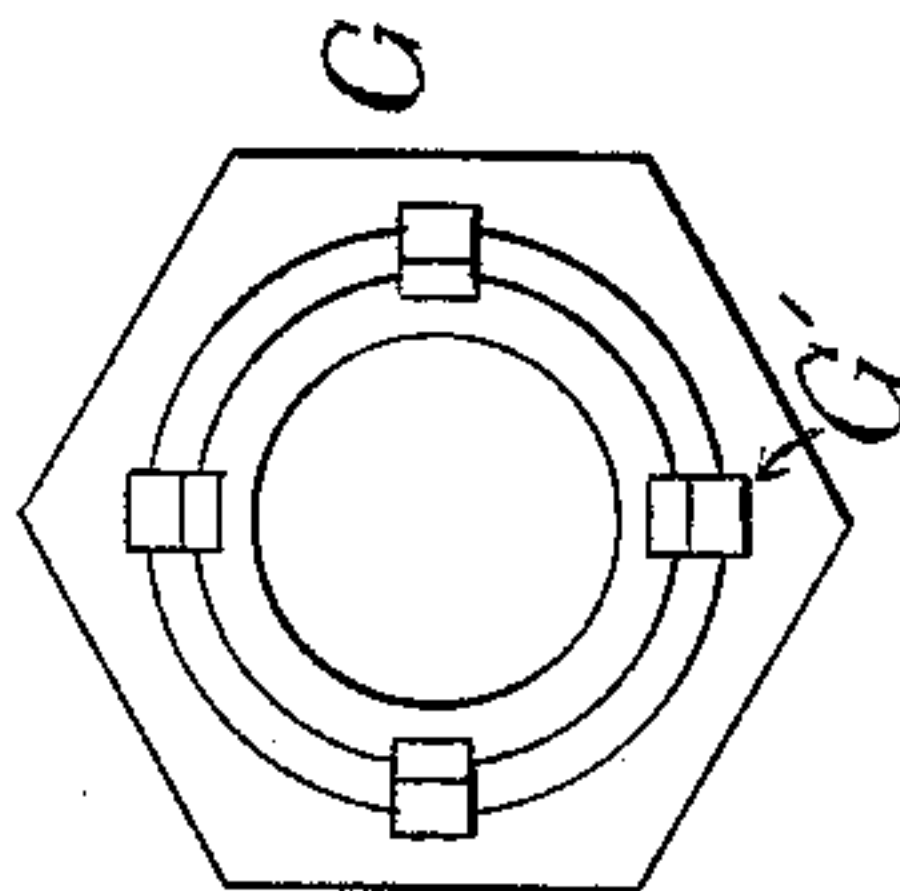


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM F. PARISH, OF MINNEAPOLIS, MINNESOTA.

## MECHANISM FOR FINISHING ENGINE BED-FRAMES.

SPECIFICATION forming part of Letters Patent No. 332,743, dated December 22, 1885.

Application filed October 16, 1885. Serial No. 180,068. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM F. PARISH, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain Improvements in Mechanism for Finishing Engine Bed-Frames, of which the following is a specification.

My invention relates to means for preparing and fitting cast-iron bed-frames of engines to receive the parts of the engine that are supported thereby. These bed-frames are usually cast in one piece, and they have preferably a circular end, to which the end of the cylinder is secured, and through which the piston-rod extends. They have also a box or boxes for the crank-shaft, and projections or lugs, to which the guides for the cross-head are secured. It is desirable to provide means by which these parts of the bed-frames may be fitted and aligned, so that when the engine is put together its working parts, supported by the bed-frame, will all be in correct position, and to do this work in a cheap and expeditious manner.

The present invention relates to the means for truing and aligning the opening through the end of the bed-frame to receive the stuffing-box through which the piston-rod passes. It is necessary that this opening be trued and aligned so that its center will be coincident with the axis of the piston-rod of the finished engine.

In the drawings forming part of this specification, Figure 1 is a plan of a bed-frame with the arbor and reamer in position therein. Fig. 2 is a front elevation, and Fig. 3 a side elevation of the reamer.

A represents a cast-iron bed-frame. It is cast in one piece, and has the end A', to which the end of the cylinder is bolted, and also, preferably, the projections or lugs L L, to which the guides for the cross-head are secured, and a box or boxes, P, for the crank-shaft.

B represents an arbor, which is preferably of T shape, having the cross part E at right angles to the main part of the arbor. This arbor is centered in the bed-frame, so that its

axis occupies the position that will be occupied by the axis of the piston-rod in the finished engine.

C C are plates or blocks by which the arbor is centered in the bed-frame and held in proper alignment while the opening through the end of the bed is trued and aligned. These plates are secured to the arbor by suitable means—as the bolts D—and are provided with adjusting-screws F, by means of which the plates may be adjusted and the arbor centered and aligned. The cross-arbor E, when used, will be brought into proper position by the centering of the arbor B, and the boxes may be finished by pouring Babbitt or other suitable metal around this cross-arbor. The cross-arbor may, however, be omitted.

G represents a reamer, having an opening through it that fits closely over the arbor. This reamer is provided with a series of cutters, G' G'. This reamer is placed over the arbor and brought into the opening in the end of the bed and rotated on the arbor. The wall of the opening through the end of the bed is thereby trued and aligned with the arbor, and made concentric with the surface of the arbor. The stuffing-box is afterward placed in this opening, and its center must be coincident with the position occupied by the axis of the arbor, and this brings the axis of the piston-rod into the same position. The means for centering the arbor may obviously be varied without departing from my invention.

No claim is made in this application to means for truing and aligning the other parts of the bed-frame.

I claim—

The combination, with the arbor B and means for centering said arbor in an engine bed-frame, of the reamer G, having an opening therein to fit said arbor, and provided with the series of cutters G', all substantially as and for the purpose set forth.

WILLIAM F. PARISH.

Witnesses:

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