(No Model.)

G. H. MACKAY.

SHAFT HANGER.

No. 362,291. Patented May 3, 1887.

FIG: 1.

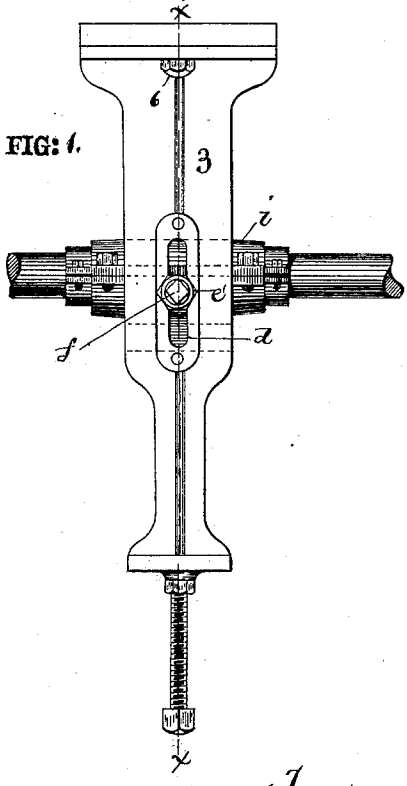


FIG: 2.

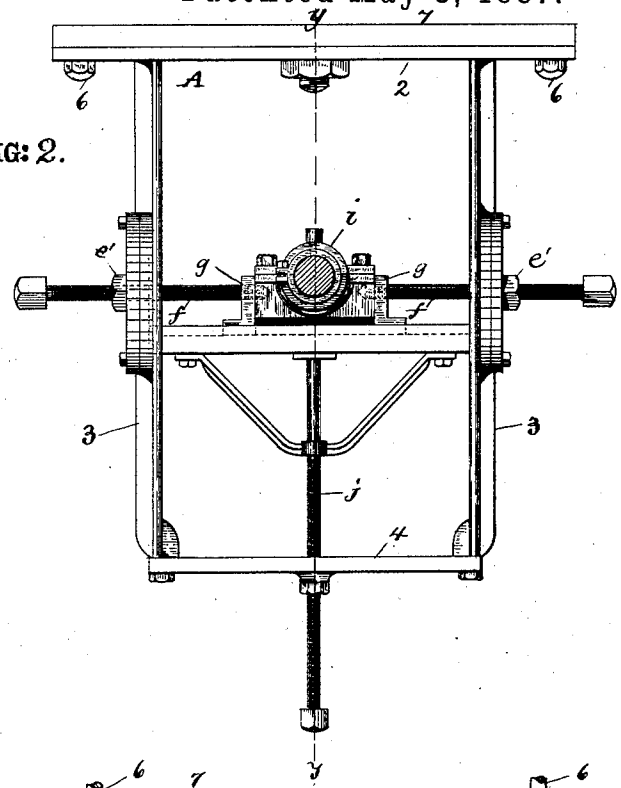


FIG: 3.

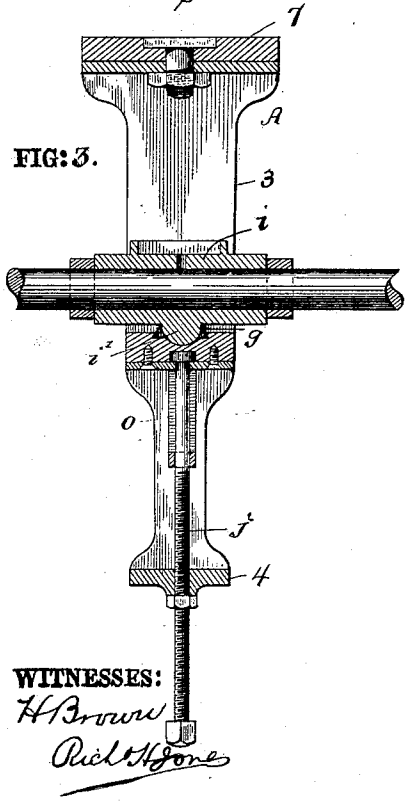
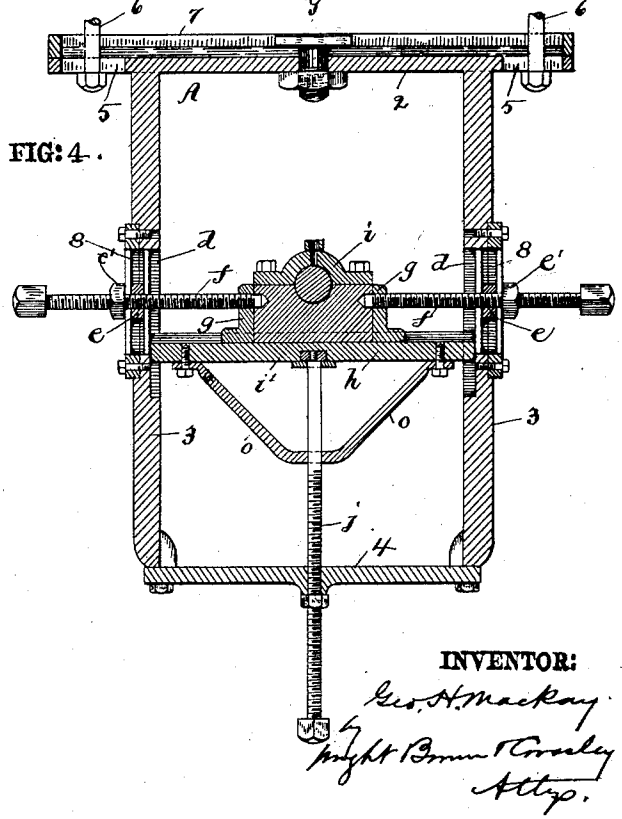


FIG: 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE H. MACKAY, OF SALEM, NEW HAMPSHIRE, ASSIGNOR OF ONE-HALF TO ORLANDO WOODBURY, OF SAME PLACE.

SHAFT-HANGER.

SPECIFICATION forming part of Letters Patent No. 362,291, dated May 3, 1887.

Application filed February 8, 1887. Serial No. 226,923. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. MACKAY, of Salem, in the county of Rockingham and State of New Hampshire, have invented certain new and useful Improvements in Shaft-Hangers, of which the following is a specification.

This invention relates to adjustable hangers for shafting, and has for its object to provide certain improvements in this class of supports for shafting, whereby a greater range of adjustment can be secured than heretofore, the bearing of the shaft so supported as that the latter may be permitted to seek its own true alignment, and greater facility for raising and placing the shaft in position may be afforded; and to this end it consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a shaft-hanger embodying my improvements. Fig. 2 represents a front elevation of the same, the shaft being shown in section. Fig. 3 represents a vertical section on the line *x x* of Fig. 1. Fig. 4 represents a vertical section on line *y y* of Fig. 2.

The same letters of reference indicate the same parts in all the figures.

In the drawings, A represents the supporting-frame of the shaft-hanger, the same consisting of a cross-bar, 2, side bars, 3 3, and a bottom cross-bar, 4. The cross-bar 2 is provided with longitudinal slots 5 5, which cross-bar is secured by means of bolts 6 6 to an independent plate, 7, which is adapted to be attached to a beam or other support, either overhead, below, or at one side of the shaft-hanger. The frame A is capable of adjustment on the plate 7, so that the position of the frame and hanger can be varied to suit the requirements of the case. The side pieces, 3 3, of the frame are provided with slots *d d*, the sides of which are grooved to receive sliding nuts *e e*, supported laterally by slats 8 8, or other suitable means, secured to or forming an integral part of the frame. Screws *f f* pass through said nuts, and through jam or set nuts *e' e'* outside the frame, into and through holding-blocks *g*, adapted to move in dovetail grooves formed in a vertically-adjustable cross-bar, *h*.

The box in which the shafting is journaled is represented by *i*, and is provided with sockets, into which the ends of the screws *f f*, projecting through the holding-blocks, extend to serve as trunnions on which the box *i* may oscillate. To provide for this motion of the box, the latter has a rounded rib, *i'*, formed on its under side, which rib rests in a concave groove formed in cross-bar *h*, as shown in Fig. 3, so that the shaft may be permitted to seek its own alignment horizontally.

j represents a strong rod passing through bottom cross-bar, 4, and having a screw-threaded connection therewith, and abutting at its upper end against cross-bar *h* and substantially supporting the same vertically, as also providing means for adjusting the same vertically.

o o indicate braces, which may be secured at one end to the lower face of cross-bar *h*, and extend down to and around rod *j*, as shown.

It will be seen that cross-bar 4 is removably secured to side bars, 3 3, which connection provides means whereby the shaft may be raised into position between said side bars, and the necessity of thrusting it endwise therethrough obviated.

By the improvements described it will be seen that a shaft hanger or support may be readily adjusted on its support, so as to meet the exigencies of any case, and that the shaft may be adjusted in its support in all directions, and be at the same time permitted to move to seek its own true alignment horizontally, and that means are also provided whereby the shaft may be readily raised into position in the hanger.

It is obvious that changes may be made in the form and arrangement of parts comprising my invention without departing from the nature or spirit thereof.

Having thus described my invention, what I claim is—

1. In a shaft-hanger, the combination, with a frame, of a cross-bar or support vertically adjustable in the frame, a journal box or bearing for a shaft adapted to rock or oscillate on said cross-bar or support, and screws *f f* in said frame for adjusting said box or bearing laterally in the frame on said cross-bar or support, the ends of said screws engaging said box

or bearing to serve as trunnions in its rocking or oscillating movements, all constructed and operating substantially as and for the purposes hereinbefore set forth.

2. In a hanger or support for shafting, the combination, with the frame A, of the vertically-adjustable cross-bar *h*, box *i*, holding-blocks *g g*, guided in ways in said cross-bar, and screws *f f*, as set forth.

3. In a hanger or support for shafting, the combination, with the frame A, of the vertically-adjustable cross-bar *h*, provided with a concave groove, and the box *i*, provided with a rounded rib, *i'*, adapted to rest in said groove, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of January, 1887.

GEORGE H. MACKAY.

Witnesses:
C. F. BROWN,
ARTHUR W. CROSSLEY.