J. FIRST.
Shaft-Hanger.

No. 214,899. Patented April 29, 1879.

Fig. 2.

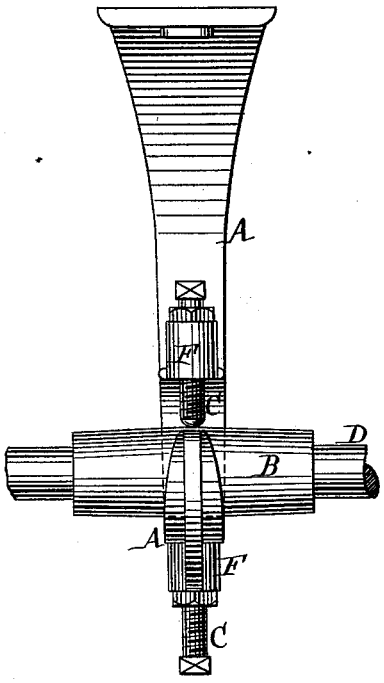


Fig. 1.

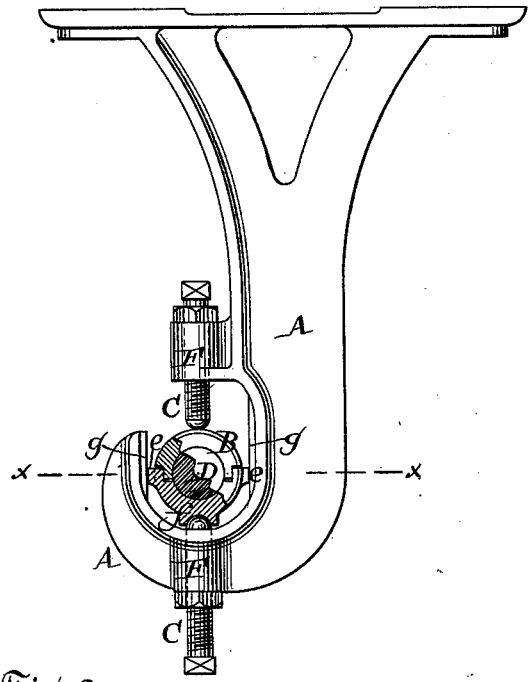
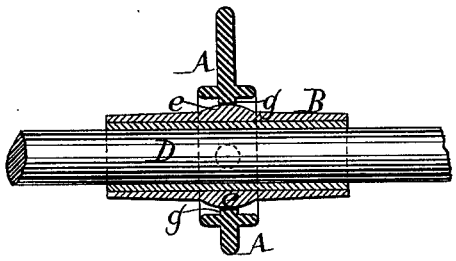


Fig. 3.



Witnesses.
Chas. Wahlers.
William Miller

Inventor:
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by Van Santvoord & Hauff
his attys

UNITED STATES PATENT OFFICE.

JOHN FIRST, OF NEW YORK, N. Y.

IMPROVEMENT IN SHAFT-HANGERS.

Specification forming part of Letters Patent No. **214,899**, dated April 29, 1879; application filed March 19, 1879.

To all whom it may concern:

Be it known that I, JOHN FIRST, of the city, county, and State of New York, have invented a new and useful Improvement in Shaft-Hangers, which invention is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a side view of my hanger, partly in section. Fig. 2 is a front view thereof. Fig. 3 is a horizontal section of the same in the line *x x*, Fig. 1.

Similar letters indicate corresponding parts.

My invention relates to that class of hangers in which the shaft-bearings are capable of adjusting themselves to the line of shafting or the journals of the shafts hung therein. This purpose has been accomplished heretofore by arranging the journal-box of a hanger to oscillate between the ends of two screws which enter center seats formed in the upper and lower parts of the box. In the hanger last referred to the journal-box is supported solely by the screws, and hence the latter are subjected to a great amount of strain, while if the shaft mounted in the box is drawn or strained in a lateral direction, as by a belt running over a pulley on the shaft, the parts of the box are pressed together by the ends of the screws acting upon the center seats of the box, and the shaft runs hot.

To overcome these disadvantages is the object of my invention, which consists in the combination of a journal-box having segmental projections on opposite sides thereof, and of two vertical center screws with rounded tips, the lower one of said screws having its top fitting in a correspondingly-shaped seat in the box, with a hanger constructed to receive the screws and to form bearings for the segmental projections, so that while the box is permitted to swing or oscillate either vertically or horizontally upon the screws, lateral strain on the box, in any of its positions, is received and counteracted by the body of the hanger, whereby the screws are relieved of strain and the parts of the box are caused to retain their normal positions.

In the drawings, the letter A designates the body of my hanger; B, the journal-box; C, the center screws; and D, a shaft mounted in the box.

On opposite sides of the box B are cast, or otherwise formed, projections or ears *e*, which have a segmental shape, and are concentric to the center or vertical axis of the box—namely, the axis of the screws C. The screws C work in sockets F, formed on the hanger A, and their axes coincide with each other, while both screws are adjusted to impinge on the box at a point opposite its longitudinal axis, one above and the other below the same. The lower part of the box B has a center seat, *f*, to receive the lower screw, C, but the upper part of the box is preferably left plain, the object of this arrangement being to render the box and the shaft A capable of a slight vertical oscillating motion.

The lower part of the hanger A is hook-shaped, as seen in Fig. 1, and on the vertical portions of its inner face are cast or otherwise formed ribs *g*, which are so shaped and arranged relatively to the segmental projections *e* of the journal-box that when the latter is put in place said projections bear or impinge upon the ribs, the result of which is that the journal-box is supported by the hanger in a lateral or transverse direction. By reason of their shape the projections *e* do not interfere with the horizontal movement of the box B on the center screws C, while they are also thus adapted to bear on the ribs *g* in any position to which the box is capable of being brought.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with the hanger having the screw-sockets F F and the ribs *g*, with concave curved inner faces, of the journal-box having the projections *e*, with convex curved faces, and the concave seat *f*, and the screws C, having rounded tips, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand and seal this 17th day of March, A. D. 1879.

JOHN FIRST. [L. S.]

Witnesses:
W. HAUFF,
CHAS. WAHLERS.