(No Model.)

# C. JACQUIN.

## SHAFT HANGER.

No. 422,020. Patented Feb. 25, 1890.

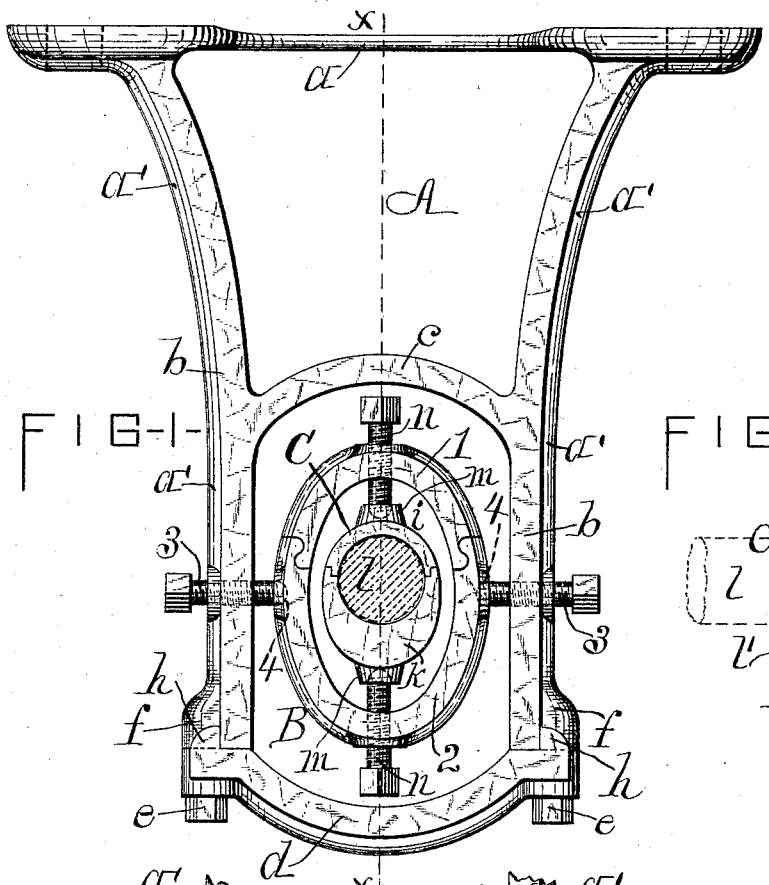


FIG-1-

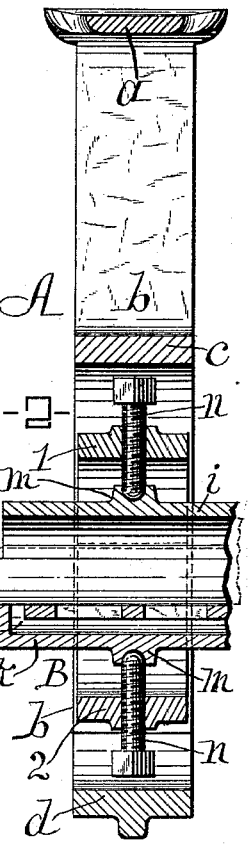


FIG-2-

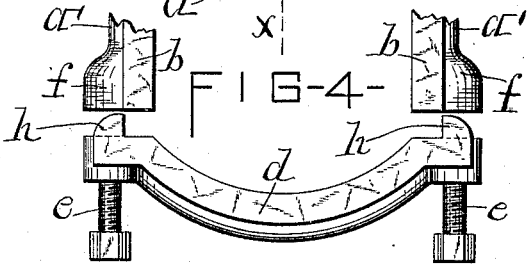


FIG-4-

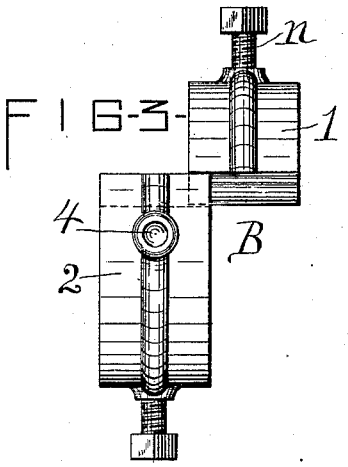


FIG-3-

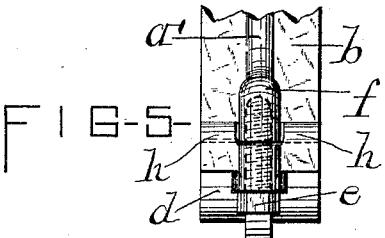


FIG-5-

ATTEST-

Frank E. Knight

Park W. Wicks

INVENTOR-

Charles Jacquin,

By Wm. C. Raymond,

his Att'y.

# UNITED STATES PATENT OFFICE.

CHARLES JACQUIN, OF SYRACUSE, NEW YORK.

## SHAFT-HANGER.

SPECIFICATION forming part of Letters Patent No. 422,020, dated February 25, 1890.

Application filed June 6, 1889. Serial No. 313,276. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES JACQUIN, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Shaft-Hangers; and I do hereby 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, in which—

Figure 1 is a front elevation of my shafting-hanger; Fig. 2, a central longitudinal section taken on line *x x*, Fig. 1. Fig. 3, a side elevation of the hanger's detachable sectional ring, illustrating its separability; Fig. 4, a detail of lower portion of hanger-frame, showing elongated gib-cap detached therefrom; and Fig. 5, a detail side view illustrating the aforenamed parts connected.

Similar letters and figures of reference indicate corresponding parts throughout the several views.

My invention relates to that class of shafting-hangers especially adapted for suspension from a beam or ceiling, and by a reversal of parts also adapted to operate as well when resting upon posts or flooring.

The prime object of my invention is to furnish a shafting-hanger that is simple yet effective and possessed of requisite strength and durability; that admits of being readily placed in desired position upon a shaft or line of shafting in service without the necessity of disconnecting the shaft-couplings or shifting the shaft longitudinally; that admits of easy and expeditious accessibility in the placing in position or the removal of the box, the ring, the shaft, or the entire hanger, and that is so constructed that fracture is practically impossible at those portions of a hanger-frame which are usually to a greater or less degree structurally weak.

My invention consists in the novel features of construction and adaptation hereinafter described, and specifically enumerated in the several clauses of claim hereunto annexed. It is constructed as follows:

A is the hanger-frame comprising, essentially, the horizontal base (or attaching-plate) *a* and the substantially-parallel vertical extended side arms *b b*, diverging, respectively, from extremities of the base *a* and connected about midway their length by a semicircular yoke *c*, all of the aforenamed parts being of an integral casting.

The letter *d* represents a detachable elongated gib-cap extending horizontally from the lower extremity of one side arm *b* to the opposite side arm, and secured thereat by large screws *e e*, respectively engaging a threaded aperture in the side enlargement *f f*, formed at the extremity of the side arms *b b*, which vertical enlargement projects centrally from the exterior side of the aforesaid arms and forming a continuation of the strengthening-rib *a' a'*, that extends centrally and longitudinally along the exterior side of the respective arms up to the base *a*.

*h h* are the gibs of the gib-cap, a pair thereof rising from either extremity of the cap and bearing against the straight outer side wall of the arm extremities at either side of the enlargements *f f*, thereby preventing undue transverse or horizontal strain and the springing apart of and consequent liability to fracture of the hanger-arms at a weak point, the liability of fracture ordinarily occurring in elongated hanger-arms which are not sufficiently braced horizontally to withstand the strain and pressure incident to the adjustment of inclosed hanger portions.

Within the space bounded by the yoke *c*, semicircular gib-cap *d*, and vertical arms *b b* of the frame A, I mount centrally therein the separable sectional ring B, of oval form vertically (or circular, if preferred) and comprising the upper and lower portions 1 2, respectively adapted to interlock at their contacting dovetailed portions and forming a substantially-S-shaped joint thereat. This sectional ring is given increased durability by a centrally-disposed circumferential strengthening-rib formed integral with the respective sections. The ring is pivotally held in position and adjusted laterally within the frame by means of screws 3 3, inserted horizontally through the frame side arms at either side of the ring and axially therewith, their protruding ends entering into sockets 4 4 at either side of the lower ring portion, as shown. By means of said screws not only is the sectional ring suitably supported in a pivotal manner, but

the ring may be adjusted laterally, as desired, by manipulating the said screws.

C is the box, of oval or other preferred contour vertically, comprising the separable hollow sections *i k*, respectively joined in such manner that the top section may readily be lifted up off of the lower section when desired, the two combined hollow sections forming a cylindrical passage for the shaft *l*, (as illustrated by dotted lines,) the lower section having preferably an oil-chamber *l'*, communicating with the aforesaid passage.

As will be observed, both the lower box-section and the lower ring-section are vertically of greater height than their upper contacting sections, their top edges terminating a short distance above the horizontal center of the box or ring, respectively.

At the circumferential top and bottom edge of the box I form projecting socket portions *m m*, into which enter the ends of the screws *n n*, which are inserted through the top and bottom portions of the surrounding ring and longitudinally in line with the sockets and pivotally securing the box in position. By means of these screws the vertical adjustment of the box is easily and satisfactorily attained; also, the pressure transmitted by the screws against the top and lower section of the box securely holds against displacement the said sections together.

It will readily be observed that by the utilization of my improved shafting-hanger whenever the mounting, replacing, or repairs of parts are desirable the box may be placed in position or removed, or both the box and the ring conjointly, or the hanger in its entirety, without necessitating the uncoupling of or the shifting of the shafting for that purpose, as required by the forms of shafting-hangers now in general usage.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A shafting-hanger provided with a pivoted sectional ring surrounding in non-contact an inclosed journal-box, the segments of said ring being detachably interlocked together at their meeting portions and adapted to removal from or positive connection with each other only by the movement longitudinally with the hanger's shafting of a segment thereof, substantially as described, and for the purposes specified.

2. A shafting-hanger provided with a horizontally-pivoted sectional ring devoid of convergent extremities and inclosing in non-contact a vertically-pivoted journal-box, the segments of said ring portion being detachably interlocked together against vertical removal or displacement and adapted to be connected to or removed one from the other only by the movement of a segment in a direction longitudinal with the hanger's shafting, substantially as described, and for the purposes specified.

3. In a shafting-hanger, the combination, with the supporting-hanger frame, of a sectional ring supporting in non-contact a journal-box vertically pivoted therein, said ring comprising an upper and lower segment detachably interlocked together in such manner that their contacting portions form a substantially-**S**-shaped joint, preventing vertical displacement or removal from operative position of the ring-segments and adapting them for removal from or connection to each other solely by the forward or rearward movement of one of said segmental portions in a line coincident with the direction of the shafting, the lower segment being sustained in operative position within the hanger-frame by upper pivotal connections at its sides with the said frame, substantially as described, and for the purposes specified.

4. In a shafting-hanger, the combination, with the hanger-frame, of an adjustable sectional ring horizontally pivoted therein, the upper and lower segments thereof having at their curvilinear locking extremities a horizontal recess and a flange, the flanges of the meeting ends of one segment fitting into the recesses of the meeting ends of the other segmental portion, and vice versa, said parts being adapted for connection to or separation from each other solely by the sliding of a segment in a line longitudinally with the shafting, and a box pivotally mounted within the sectional ring and out of contact therewith, substantially as described, and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 7th day of May, 1889.

CHARLES JACQUIN. [L. S.]

Witnesses:
WM. C. RAYMOND,
FRANK. E. WRIGHT.