

(No Model.)

I. N. HAMILTON.
SHAFTING HANGER.

No. 573,182.

Patented Dec. 15, 1896.

Fig. 1.

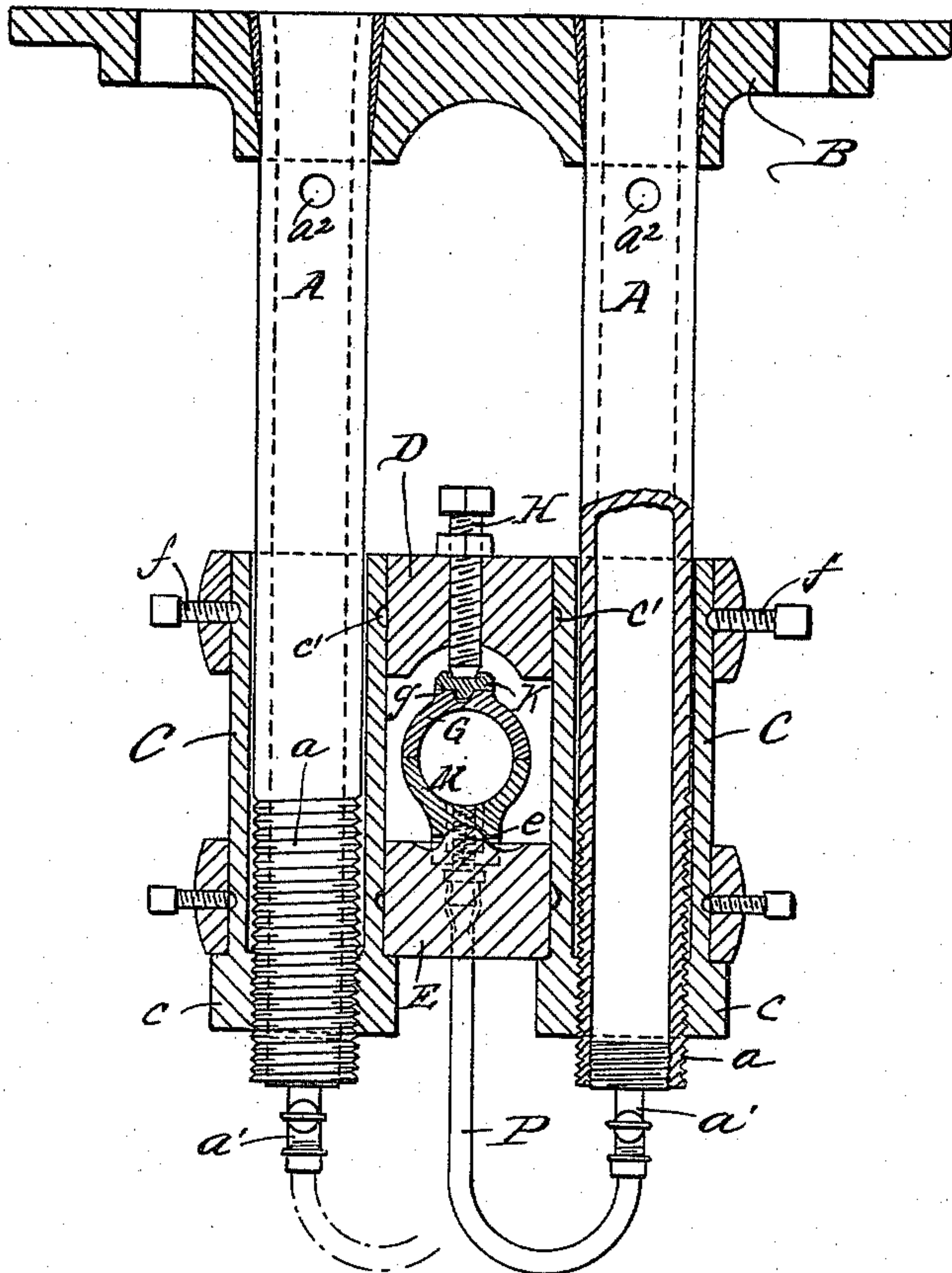
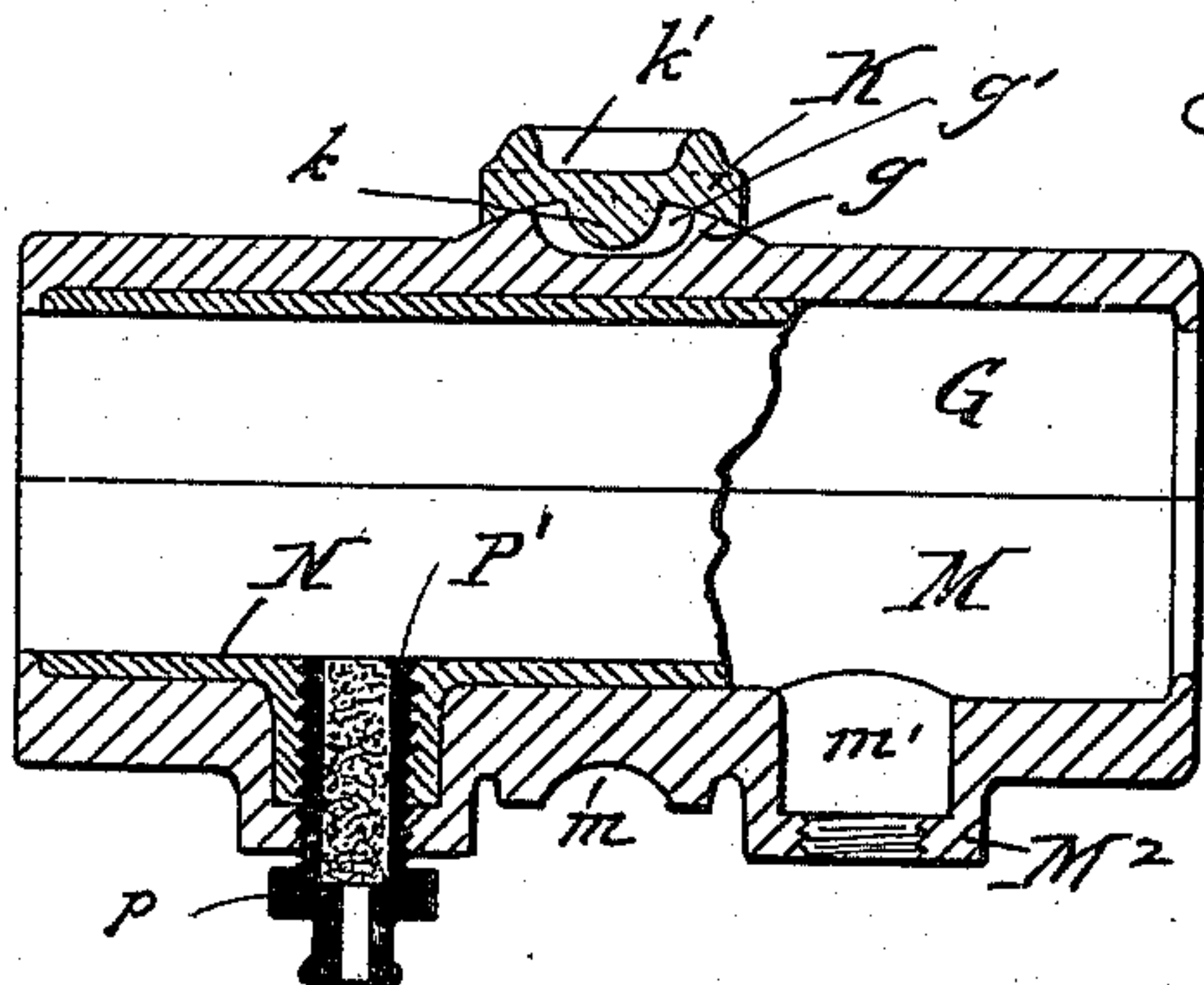


Fig. 2.



Witnesses

P. M. Humeau
David Levan

Isaac N. Hamilton
Inventor

By Attorney

J. H. Stewart

UNITED STATES PATENT OFFICE.

ISAAC N. HAMILTON, OF READING, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JAMES H. CARPENTER, OF SAME PLACE.

SHAFTING-HANGER.

SPECIFICATION forming part of Letters Patent No. 573,182, dated December 15, 1896.

Application filed December 23, 1895. Serial No. 573,028. (No model.)

To all whom it may concern:

Be it known that I, ISAAC N. HAMILTON, a citizen of the United States, residing at Reading, county of Berks, State of Pennsylvania, have invented certain Improvements in Shafting-Hangers, of which the following is a specification.

My invention relates particularly to shafting-hangers; and the main objects of my improvements are, first, to provide a large range of adjustment, and, second, to insure easy and economical lubrication.

The invention is fully described in connection with the accompanying drawings and is specifically pointed out in the claims.

Figure 1 is an elevation, partly in section, of a shafting-hanger embodying my improvements in their preferred form. Fig. 2 is a longitudinal section of the shafting box or bearing.

Describing specifically the construction shown in the drawings, A A are parallel tubular guides depending from a plate B, which is adapted to be secured to a timber or other support, as usual. These guides are preferably formed separately of piping fixed rigidly and accurately to the plate in any suitable manner. Upon the guides are movably mounted yokes or cross-heads D E to carry the box made in two sections, (marked G and M.) As indicated, these cross-head carriers are formed separately and secured at each end to sleeves C and C' on the guides A and A', respectively. These sleeves are formed with nut ends *c c*, engaging the screw-threaded portions *a a* of the guides, so as to be readily moved upward or downward on the latter, as desired, and they are provided with circular grooves *c' c'*, which receive the ends of set-bolts *f f* in the cross-head carriers, so as to fix their relative location upon the sleeves, while at the same time permitting the latter to be turned in the carriers to adjust them up or down, as may be required. When sufficiently adjusted, the carriers and sleeves may be rigidly connected by tightening up the set-bolts *f f'*.

The box in two sections (marked G and M) is pivotally mounted between the cross-head carriers D E, the lower box-section M being socketed centrally on the lower carrier,

as indicated at *m e*, and the upper section G being similarly pivoted upon the end of an adjusting-screw H, except that I prefer to interpose a loose piece K between the adjusting-screw and the top of the box. This piece rides upon a saddle *g* and has a teat *k*, which engages an oblong recess *g'* in said saddle, and also a seat *k'* for the end of the screw H. The surface of the saddle *g* is curved, so as to permit either end of the box to be raised or lowered to keep the same in line with the shaft, the position of the teat *k* in the oblong recess *g'* being changed, but the piece K maintaining its position relative to the screw H.

In order to provide for continuous and economical lubrication, which is a main object of my invention, I convert the tubular guides A A into oil-reservoirs by merely providing openings, as *a²*, for filling the same and arranging the lower ends for connection to flexible tubings P, running, preferably, from each reservoir to the lower section M on either side of the pivotal support *m*. This tubing from each reservoir connects to an oiling-pocket P' in the box M, the top of which pocket extends to the bearing-surface for the shafting, so that absorbent material—felt washers or wicking, for instance—packed therein will contact with the surface of the shaft and lubricate the latter. These oiling-pockets are preferably formed, as shown, with a screw-threaded body and an angular head *p*, which serves as a means for conveniently screwing the body through the boss M² on the bottom of the box until the head is seated firmly against said boss. I also form a recess *m'* in the interior of the box somewhat larger than the screw-threaded body of the oil-pocket, thus providing an annular space around the latter, in which the Babbitt metal N, which forms the lining of the box, is closely packed around the screw-threaded body of the pocket, so as to avoid any admission of oil between the lining and the shell of the box.

By my improved construction I thus provide what may be termed a "fountain-feed lubricator," the tubular guides A A serving to store a relatively large quantity of oil and provide sufficient head to insure a constant

supply of it to the absorbent material in contact with the shafting, while at the same time the flow is entirely suspended when the shafting is not in motion. My improved construction is also very advantageous because of the great range and convenience of the adjustment provided. The box-carriers can be adjusted upon the guides A A for considerable variations, thus avoiding all blocking, such as is frequently required, while at the same time the construction enables the most exact alinement to be readily attained.

What I claim is--

1. A shafting-hanger comprising two parallel guides, sleeve-nuts thereon, cross-head carriers mounted on said sleeve-nuts and jointly movable therewith, and shaft-box pivotally mounted between the carriers substantially as set forth.

2. A shafting-hanger comprising two parallel tubular guides adapted to serve as oil-reservoirs, and shaft-box adjustably mounted upon said guides and in communication with said oil-reservoirs substantially as set forth.

3. In a shafting-hanger the combination with fixed guides arranged to serve as oil-reservoirs, of an adjustable shaft-box having a flexible oil connection therewith substantially as set forth.

4. In a shafting-hanger the combination with parallel guides screw-threaded at their lower ends, of sleeve-nuts rotatable thereon, and cross-head carriers for the shaft-boxes

mounted upon said sleeves and fixedly attachable thereto by means of set-bolts engaging circular grooves in the sleeves, substantially as set forth.

5. In a shafting-hanger the combination with an oil-reservoir of a shaft-box having a bottom pocket for absorbent material, a lining metal filling a recess in the box surrounding said pocket, and a connecting-tube between said bottom pocket and the oil-reservoir substantially as set forth.

6. In a shafting-hanger the combination with an oil-reservoir of a shaft-box having an interior bottom recess *m'*, a separately-formed pocket for absorbent material screw-threaded and inserted upwardly into said recess, a metal lining for the box filling the recess around said pocket and engaging the screw-threaded portion of the latter, and a tubular connection between the projecting end of said box and the oil-reservoir substantially as set forth.

7. The combination with the box-carriers of the box formed with a curved saddle having an oblong recess, the cap-piece riding on said saddle with a boss engaging the recess, and the set-bolt, all substantially as set forth.

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

ISAAC N. HAMILTON.

Witnesses:

CAMERON E. STRAUSS,
W. G. STEWART.