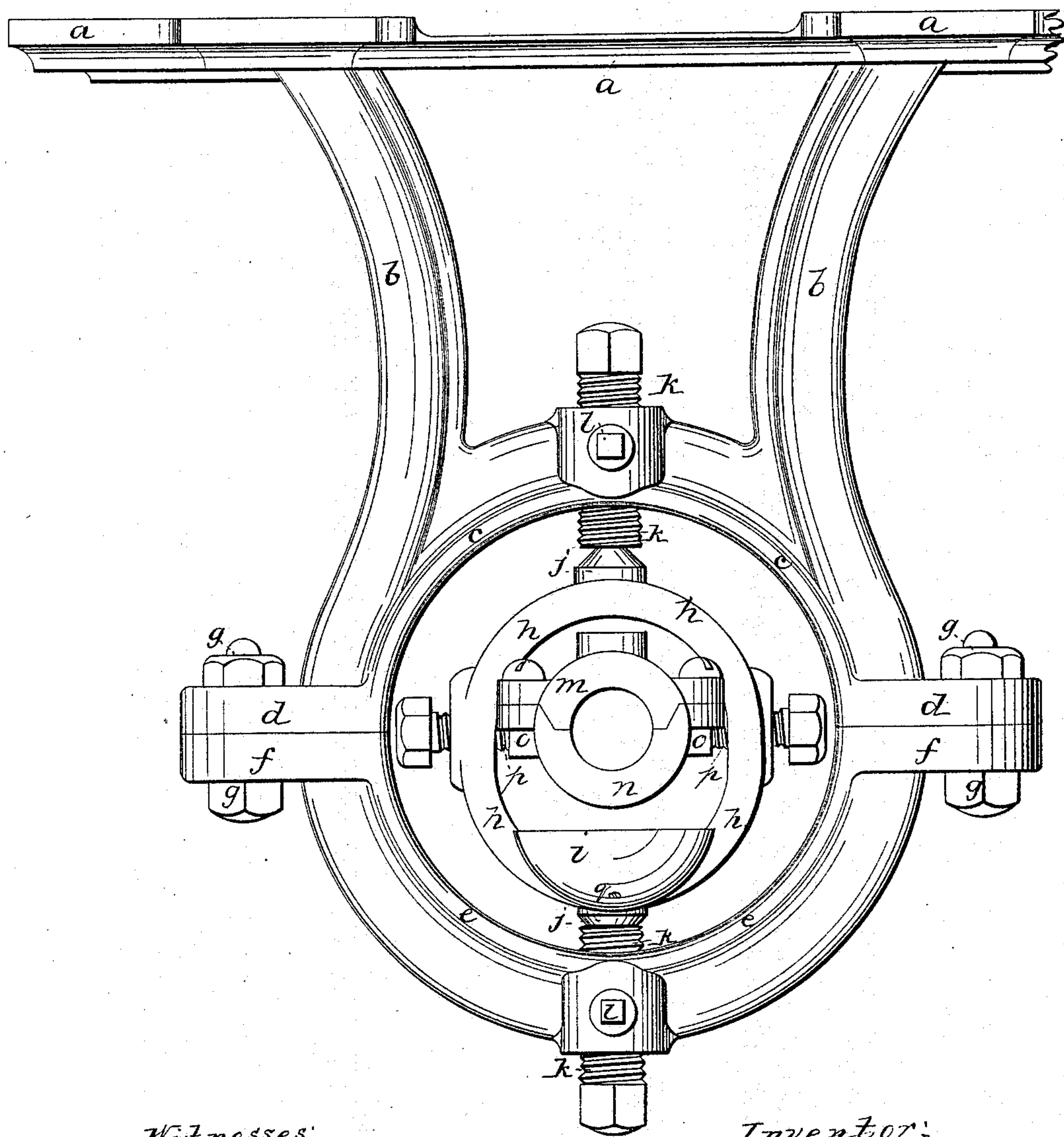


J. M. Stone,

Shaft Hanger.

N^o 69,041.

Patented Sep. 17, 1867.



Witnesses;

*S. H. Latimer
G. H. Smith.*

Inventor;

*J. M. Stone
By his Atty.
Crosby & Gould.*

United States Patent Office.

JOSEPH M. STONE, OF NORTH ANDOVER, MASSACHUSETTS, ASSIGNOR TO
DAVIS AND FURBER, OF THE SAME PLACE.

Letters Patent No. 69,041, dated September 17, 1867.

IMPROVEMENT IN HANGERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSEPH M. STONE, of North Andover, in the county of Essex, and State of Massachusetts, have invented certain new and useful Improvements in Hangers; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

It has long been common to so connect the boxes for shafting in hangers, that the boxes adjust themselves in a measure by vibrating on or about one axial line to accommodate changes in the line of shafting which occur in a vertical direction.

My invention retains this provision, and consists in combining therewith provision for allowing each hanger-box to vibrate on a vertical axis, so that the box or shaft journal is capable of self-adjustment to lateral variations of the shafting from its normal line; and my invention further consists in providing both the vertical and horizontal pivots or axes of the journal-box with adjusting-screws by means of which, within certain limits, positive manipulatory adjustment of the journal-boxes may be had to bring the shaft truly to its normal line; and my invention also consists in such a construction of hangers that the whole line of the shafting, or any section thereof, can be dropped vertically from the hanger whenever it is desirable to take down the whole or a portion of the shafting to change the pulleys thereupon, either as to position or size, or to perform on the shaft any needed action.

The drawing represents in elevation a hanger in which my invention is embodied.

The upper part of the hanger is made up of a cross-bar, *a*, by which it is bolted in place, and two depending members *b b* from said bar, these being united by a semicircular brace, *c*, and suitable ears *d d* are provided, which terminate the members *b b*. The lower part of the hanger is made of a semicircular brace, *e*, provided with ears *f f*, corresponding with the ears *d d*, the two parts of the hanger being united by screw-bolts *g g* passing through said ears. Within the space enclosed by *c e, e e*, is the hoop *h*, integral with which is cast the drip-cup *i*. Pivots *j j* are fixed in this hoop *h*, which find bearings in the countersunk ends of the vertical screws *k k*, which are located as shown in nuts made in bosses formed on the braces *c* and *e*, and in said bosses are set-screws *l*, which may be made to pinch the screws *k* to prevent accidental turning thereof. The journal or shaft-bearing box is made of two parts, a cap, *m*, and a seat, *n*, on the latter of which are bosses *o*, which receive the horizontal screws *p*, which, passing through the hoop *h* and fitting the nut-threads formed therein, make the adjustable horizontal axis, on which the box *m n* pivots automatically to accommodate vertical disarrangements of the shaft, and by which manipulatory adjustments of the shaft may be made to line it up laterally. The box *m n* and the hoop *h* vibrate on the axis of the screws *k*, to automatically accommodate lateral variations of the shaft from its normal line, while by manipulations of the screws *k k* the shaft may be adjusted to a horizontal line. To take down the whole line of shafting, with all the pulleys and couplings thereupon undisturbed, and without need of moving the shaft laterally, the lower part of the hanger has only to be removed by taking out the screw-bolts *g g*, and the shaft having been previously secured from falling by lashings or props, may be lowered as most convenient. The drip-cup *i* is provided with screw-plugs *q*, so that on removal of said plugs any accumulation of the drippings may be conveniently drawn off. It will be evident that the form and arrangement of the pieces *a* and *b* may be so modified as to change the support of the shaft-box into a bracket, fit for bolting to vertical or inclined surfaces, or into an upright stand instead of a depending hanger. When desirable the construction of the casting to which the box is pivoted may be modified so as not to entirely encompass the same, a space or opening being left through which the shaft may be removed.

I claim, in a hanger so constructed and arranged as to allow free motions of the shaft-supporting box automatically on both of two axes, provision for hanging the box by adjustable entering pivots within a frame, which frame is also held or suspended by adjustable entering pivots.

Also the construction of the hanger in two parts, arranged with respect to each other and to the shaft-bearing box, substantially as described.

Also the combination of the shaft-box with the pivoted hoop.

JOSEPH M. STONE.

Witnesses:

O. O. DAVIS.

G. G. DAVIS.